



C 107	15.8	1.1	19	1	ADI79331	Human HER2 (EGFR2)	C 180	15.8	1.1	21	1	ADK01294	Rat DNA microarray
C 108	15.8	1.1	19	1	ADI79082	Human HER2 (EGFR2)	C 181	15.8	1.1	21	1	ADK01330	Rat DNA microarray
C 109	15.8	1.1	20	1	AAO68869	Self paired oligon	C 182	15.8	1.1	21	1	ABD25933	AA505075-derived o
C 110	15.8	1.1	20	1	AAO75579	Reverse transcript	C 183	15.8	1.1	21	1	ADQ030710	Device with substa
C 111	15.8	1.1	20	1	AAO75582	Reverse transcript	C 184	15.8	1.1	21	1	ADQ030708	Device with substa
C 112	15.8	1.1	20	1	AAO75580	Reverse transcript	C 185	15.8	1.1	22	1	ADFI137373	Small cell lung ca
C 113	15.8	1.1	20	1	AAO74916	Mammalian stem cel	C 186	15.6	1.1	22	1	AAQ647724	2,5'-linked tetra
C 114	15.8	1.1	20	1	AAV07952	Phosphorothioate o	C 187	15.6	1.1	22	1	AAAB88220	EBR-1 double stran
C 115	15.8	1.1	20	1	AAV47686	Unmethylated CpG d	C 188	15.6	1.1	22	1	AAFI17413	LI cleavage site f
C 116	15.8	1.1	20	1	AAV74243	CpG-N motif O-ODN	C 189	15.6	1.1	22	1	ACCF74147	Forward primer for
C 117	15.8	1.1	20	1	AAZ05061	PCR primer used to	C 190	15.6	1.1	22	1	ADFI23348	LI retrotransposon
C 118	15.8	1.1	20	1	AAZ02676	PCR primer used to	C 191	15.6	1.1	22	1	ADQ25630	Junction-specific
C 119	15.8	1.1	20	1	AAAI3753	Stem cell factor u	C 192	15.4	1.1	17	1	AAK68796	Human fil1 VEGF re
C 120	15.8	1.1	20	1	AAAF9116	Immunostimulatory	C 193	15.4	1.1	17	1	AAA25445	Oestrogen receptor
C 121	15.8	1.1	20	1	AAH41332	Universal stem cel	C 194	15.4	1.1	17	1	AAAF02226	Hammerhead ribozym
C 122	15.8	1.1	20	1	AAAS04112	Human SCF (stem ce	C 195	15.4	1.1	17	1	ABZ65528	Human HER2 DNAzyme
C 123	15.8	1.1	20	1	AAAF9092	Mammalian stem cel	C 196	15.4	1.1	17	1	ACD61808	HCV minus strand p
C 124	15.8	1.1	20	1	AAH23890	Human SCF (stem ce	C 197	15.4	1.1	17	1	ADH70550	Human Vbeta gene r
C 125	15.8	1.1	20	1	AAH43689	PRF3 reverse pri	C 198	15.4	1.1	17	1	AD185262	HCV DNAzyme substr
C 126	15.8	1.1	20	1	AAAS04213	Human SCF (stem ce	C 199	15.4	1.1	18	1	AAQ20109	Cross-linking olig
C 127	15.8	1.1	20	1	AAAS10448	Human stem cell fa	C 200	15.4	1.1	18	1	AAQ20108	Cross-linking olig
C 128	15.8	1.1	20	1	ABST77759	Angiogenesis inhib	C 201	15.4	1.1	18	1	AAQ30448	Oligomer TNFR943 f
C 129	15.8	1.1	20	1	ABJ39008	Immunostimulatory	C 202	15.4	1.1	18	1	AAQ30447	Oligomer TNFR942 f
C 130	15.8	1.1	20	1	ABD35465	Rat SCF 5'-cDNA, am	C 203	15.4	1.1	18	1	AAZ91373	Human PTEN phospho
C 131	15.8	1.1	20	1	ABST3849	SCF universal olig	C 204	15.4	1.1	18	1	AAZ13999	Human PTEN antisen
C 132	15.8	1.1	20	1	ABK72022	Human MTG16 gene,	C 205	15.4	1.1	18	1	AAH19624	Complementary olig
C 133	15.8	1.1	20	1	ACD99549	Immunostimulatory	C 206	15.4	1.1	18	1	ABK11199	Human PTEN antisen
C 134	15.8	1.1	20	1	ADB36618	Immunostimulatory	C 207	15.4	1.1	18	1	ADD20226	Osteochronis nlioti
C 135	15.8	1.1	20	1	ADBS2461	Stem cell factor (	C 208	15.4	1.1	18	1	ADFA138	Human phosphatase
C 136	15.8	1.1	20	1	ABE91586	Human oligonucleot	C 209	15.4	1.1	18	1	ADFA138	Human PTEN specif
C 137	15.8	1.1	20	1	ABZ88534	Human oligonucleot	C 210	15.4	1.1	18	1	ADV30188	EBB-2 gene antisec
C 138	15.8	1.1	20	1	ABZ88880	Human oligonucleot	C 211	15.4	1.1	20	1	AAV48864	Cardiovascular dis
C 139	15.8	1.1	20	1	ABZ89179	Human oligonucleot	C 212	15.4	1.1	20	1	ABK28788	Corn male reproduc
C 140	15.8	1.1	20	1	ABZ87176	Human oligonucleot	C 213	15.4	1.1	20	1	ACA889978	Human oligonucleot
C 141	15.8	1.1	20	1	ABZ89702	Human oligonucleot	C 214	15.4	1.1	20	1	ABZ91205	H37989-derived oli
C 142	15.8	1.1	20	1	ABZ88973	Human oligonucleot	C 215	15.4	1.1	21	1	ABD27435	SNP specific lower
C 143	15.8	1.1	20	1	ABZ88694	Human oligonucleot	C 216	15.4	1.1	21	1	AAH40594	Al654215-derived o
C 144	15.8	1.1	20	1	ABZ89240	Human oligonucleot	C 217	15.4	1.1	21	1	ABD25908	Human PTEN specif
C 145	15.8	1.1	20	1	ABD23406	Human myosin X-der	C 218	15.4	1.1	21	1	AD130232	Electrochemical de
C 146	15.8	1.1	20	1	ABD25470	AI041212-derived o	C 219	15.4	1.1	21	1	ADK67451	Human TFAP-2-beta
C 147	15.8	1.1	20	1	ABD21764	Human stanniocalci	C 220	15.4	1.1	21	1	ADQ60172	Reverse transcript
C 148	15.8	1.1	20	1	ABD25409	Human oligonucleot	C 221	15.2	1.1	20	1	AAO75581	Reverse transcript
C 149	15.8	1.1	20	1	ABD25110	Human oligonucleot	C 222	15.2	1.1	20	1	AAO75585	Reverse transcript
C 150	15.8	1.1	20	1	ABD25116	AA102528-derived o	C 223	15.2	1.1	20	1	AAO75596	Reverse transcript
C 151	15.8	1.1	20	1	ABD27816	AA102544-derived o	C 224	15.2	1.1	20	1	AAO75589	Reverse transcript
C 152	15.8	1.1	20	1	ADH67348	AA463249-derived o	C 225	15.2	1.1	20	1	AAO75577	Reverse transcript
C 153	15.8	1.1	20	1	ADH67401	Human glucocortico	C 226	15.2	1.1	20	1	AAO75597	Reverse transcript
C 154	15.8	1.1	20	1	ADK74414	Chimeric phosphoro	C 227	15.2	1.1	20	1	AAO75588	Reverse transcript
C 155	15.8	1.1	20	1	ADK74367	Chimeric phosphoro	C 228	15.2	1.1	20	1	AAO75564	Reverse transcript
C 156	15.8	1.1	20	1	ADP78117	Chimeric phosphoro	C 229	15.2	1.1	20	1	AAO75565	Reverse transcript
C 157	15.8	1.1	20	1	ADP78118	Chimeric phosphoro	C 230	15.2	1.1	20	1	AAO75595	Reverse transcript
C 158	15.8	1.1	20	1	ADP99303	Stem cell factor,	C 231	15.2	1.1	20	1	AAAX24525	Human SR-BI gene e
C 159	15.8	1.1	21	1	AAO75724	Reverse transcript	C 232	15.2	1.1	20	1	AAAX24617	Human UGT2B7 exon
C 160	15.8	1.1	21	1	AAO75719	Reverse transcript	C 233	15.2	1.1	20	1	AAZ50703	Forward primer for
C 161	15.8	1.1	21	1	AAO75722	Reverse transcript	C 234	15.2	1.1	20	1	AAZ51514	Human E2F transcri
C 162	15.8	1.1	21	1	AAO75723	Reverse transcript	C 235	15.2	1.1	20	1	AAAC67142	Myt1e SAc1 gene-s
C 163	15.8	1.1	21	1	AAO75726	Reverse transcript	C 236	15.2	1.1	20	1	AAAS97565	Polynucleotide sep
C 164	15.8	1.1	21	1	AAO75731	Reverse transcript	C 237	15.2	1.1	20	1	AAAL43954	Human UGT2B7 DNA f
C 165	15.8	1.1	21	1	AAO75734	Reverse transcript	C 238	15.2	1.1	20	1	AAAD46040	Candida albicans G
C 166	15.8	1.1	21	1	AAO75720	Reverse transcript	C 239	15.2	1.1	20	1	ABZ31489	HT15-C downstream
C 167	15.8	1.1	21	1	AAZ90186	Reverse transcript	C 240	15.2	1.1	20	1	AAAD35095	Mycobacterium tube
C 168	15.8	1.1	21	1	AAZ90191	PCR primer used for	C 241	15.2	1.1	20	1	ABZ79933	Human SR-BI gene p
C 169	15.8	1.1	21	1	ABZ97869	Human UDP-glucuron	C 242	15.2	1.1	20	1	AAAL62333	Human oligonucleot
C 170	15.8	1.1	21	1	ADK01287	Rat DNA microarray	C 243	15.2	1.1	20	1	ACD44978	Human oligonucleot
C 171	15.8	1.1	21	1	ADK01290	Rat DNA microarray	C 244	15.2	1.1	20	1	ABZ89567	Human oligonucleot
C 172	15.8	1.1	21	1	ADK01341	Rat DNA microarray	C 245	15.2	1.1	20	1	ABZ85312	Human oligonucleot
C 173	15.8	1.1	21	1	ADK01293	Rat DNA microarray	C 246	15.2	1.1	20	1	ABZ85667	Human oligonucleot
C 174	15.8	1.1	21	1	ADK01285	Rat DNA microarray	C 247	15.2	1.1	20	1	ABZ92865	Human oligonucleot
C 175	15.8	1.1	21	1	ADK01291	Rat DNA microarray	C 248	15.2	1.1	20	1	ABZ89876	Human oligonucleot
C 176	15.8	1.1	21	1	ADK01295	Rat DNA microarray	C 249	15.2	1.1	20	1	ABZ91658	Human oligonucleot
C 177	15.8	1.1	21	1	ADK01286	Rat DNA microarray	C 250	15.2	1.1	20	1	ABZ89719	Human oligonucleot
C 178	15.8	1.1	21	1	ADK01331	Rat DNA microarray	C 251	15.2	1.1	20	1	ABZ89719	Human oligonucleot
C 179	15.8	1.1	21	1	ADK01289	Rat DNA microarray	C 252	15.2	1.1	20	1	ABD21542	S100 calcium bindi

c 253	15.2	1.1	20	1	ABD21897	Human stanniocalcin	c 326	15.2	1.1	21	1	ACA63932	Novel human secret
c 254	15.2	1.1	20	1	ABD25797	AI085559-derived o	c 327	15.2	1.1	21	1	ACA72096	Human PRO polypept
c 255	15.2	1.1	20	1	ABD25949	AA060703-derived o	c 328	15.2	1.1	21	1	ABX92736	Human PRO DNA prob
c 256	15.2	1.1	20	1	ABD27888	AA258396-derived o	c 329	15.2	1.1	21	1	ACA66477	Human secreted/tra
c 257	15.2	1.1	20	1	ABD29095	AA679352-derived o	c 330	15.2	1.1	21	1	ACC79578	triplef forming ol
c 258	15.2	1.1	20	1	ABD26106	AA63249-derived o	c 331	15.2	1.1	21	1	ADA25103	Secreted and trans
c 259	15.2	1.1	20	1	ADH66257	Human glucocortico	c 332	15.2	1.1	21	1	ADC30078	Novel human secret
c 260	15.2	1.1	20	1	ADH66380	Human glucocortico	c 333	15.2	1.1	21	1	ADC12764	Human secreted/tra
c 261	15.2	1.1	20	1	ADH67400	Human glucocortico	c 334	15.2	1.1	21	1	ACD29493	Novel human secret
c 262	15.2	1.1	20	1	ADH66542	Human glucocortico	c 335	15.2	1.1	21	1	ADB74070	Human PRO DNA prob
c 263	15.2	1.1	20	1	ADU46173	Human CD36L1 genot	c 336	15.2	1.1	21	1	ADB76786	Human PRO associat
c 264	15.2	1.1	20	1	ADK73801	Chimeric phosphoro	c 337	15.2	1.1	21	1	ADC44212	Human PRO 362 Tagm
c 265	15.2	1.1	20	1	ADK81318	Chimeric phosphoro	c 338	15.2	1.1	21	1	ADC64972	Human PRO 362 Tagm
c 266	15.2	1.1	20	1	ADK74442	Chimeric phosphoro	c 339	15.2	1.1	21	1	ADC63936	Human PRO 362 Tagm
c 267	15.2	1.1	20	1	ADK78029	Chimeric phosphoro	c 340	15.2	1.1	21	1	ADC67036	Human PRO 362 Tagm
c 268	15.2	1.1	20	1	ADJ59022	Human ESM-1 antise	c 341	15.2	1.1	21	1	ADC69160	Human PRO 362 Tagm
c 269	15.2	1.1	20	1	ADM15109	Human mPGES-1 chim	c 342	15.2	1.1	21	1	ADC63320	Human PRO 362 Tagm
c 270	15.2	1.1	20	1	ADM15020	Human mPGES-1 chim	c 343	15.2	1.1	21	1	ADC68285	Human PRO 362 Tagm
c 271	15.2	1.1	20	1	ADM15905	Murine SACL DNA PC	c 344	15.2	1.1	21	1	ADC41605	Human PRO 362 Tagm
c 272	15.2	1.1	20	1	ADN06744	Human FLAP related	c 345	15.2	1.1	21	1	ADC67660	Human PRO 362 Tagm
c 273	15.2	1.1	20	1	ADNS8960	Human B7H target s	c 346	15.2	1.1	21	1	ADC62596	Human PRO 362 Tagm
c 274	15.2	1.1	20	1	ADNS8812	Human B7H antisens	c 347	15.2	1.1	21	1	ADC42229	Human PRO 362 Tagm
c 275	15.2	1.1	20	1	ADP78311	Chimeric phosphoro	c 348	15.2	1.1	21	1	ADB49598	Human PRO 362 Tagm
c 276	15.2	1.1	20	1	ADP69305	5' donor site at c	c 349	15.2	1.1	21	1	ADB35652	Human PRO 362 Tagm
c 277	15.2	1.1	20	1	ADP84381	Reverse transcrip	c 350	15.2	1.1	21	1	ADE16766	Human PRO 362 Tagm
c 278	15.2	1.1	21	1	AAQ75729	Reverse transcrip	c 351	15.2	1.1	21	1	ADD73381	Human PRO 362 Tagm
c 279	15.2	1.1	21	1	ADK01284	Rat DNA microarray	c 352	15.2	1.1	21	1	ADE172739	Human PRO 362 Tagm
c 280	15.2	1.1	21	1	AAQ75728	Reverse transcrip	c 353	15.2	1.1	21	1	ADE17390	Human PRO 362 Tagm
c 281	15.2	1.1	21	1	AAQ75727	Reverse transcrip	c 354	15.2	1.1	21	1	ADF47404	Human PRO 362 Tagm
c 282	15.2	1.1	21	1	AAQ75724	Rice starch branch	c 355	15.2	1.1	21	1	ADG53161	Human PRO 362 Tagm
c 283	15.2	1.1	21	1	AAQ75630	Reverse transcrip	c 356	15.2	1.1	21	1	ADG60481	Human PRO 362 Tagm
c 284	15.2	1.1	21	1	AAQ75762	Reverse transcrip	c 357	15.2	1.1	21	1	ADJ61241	Human PRO 362 Tagm
c 285	15.2	1.1	21	1	AAQ75676	Reverse transcrip	c 358	15.2	1.1	21	1	ACD42897	Secreted and trans
c 286	15.2	1.1	21	1	AAQ75627	Reverse transcrip	c 359	15.2	1.1	21	1	ADK01314	Rat DNA microarray
c 287	15.2	1.1	21	1	AAQ75631	Reverse transcrip	c 360	15.2	1.1	21	1	ADK01314	Rat DNA microarray
c 288	15.2	1.1	21	1	AAQ75693	Reverse transcrip	c 361	15.2	1.1	21	1	ADK01313	Rat DNA microarray
c 289	15.2	1.1	21	1	AAQ75634	Reverse transcrip	c 362	15.2	1.1	21	1	ADK01333	Rat DNA microarray
c 290	15.2	1.1	21	1	AAQ75684	Reverse transcrip	c 363	15.2	1.1	21	1	ADK01297	Rat DNA microarray
c 291	15.2	1.1	21	1	AAQ75685	Reverse transcrip	c 364	15.2	1.1	21	1	ADK01337	Rat DNA microarray
c 292	15.2	1.1	21	1	AAQ75695	Reverse transcrip	c 365	15.2	1.1	21	1	ADK01299	Rat DNA microarray
c 293	15.2	1.1	21	1	AAQ75682	Reverse transcrip	c 366	15.2	1.1	21	1	ADK01315	Rat DNA microarray
c 294	15.2	1.1	21	1	AAQ75753	Reverse transcrip	c 367	15.2	1.1	21	1	ADK01298	Rat DNA microarray
c 295	15.2	1.1	21	1	AAQ75694	Reverse transcrip	c 368	15.2	1.1	21	1	ADJ99088	Human CYP2D6 PCR p
c 296	15.2	1.1	21	1	AAQ75700	Reverse transcrip	c 369	15.2	1.1	21	1	ADJ48898	Human PRO 362 Tagm
c 297	15.2	1.1	21	1	AAQ75758	Reverse transcrip	c 370	15.2	1.1	21	1	ADJ88989	Human PRO 362 Tagm
c 298	15.2	1.1	21	1	AAQ75716	Reverse transcrip	c 371	15.2	1.1	21	1	ADF61639	Human PRO 362 Tagm
c 299	15.2	1.1	21	1	AAQ75764	Reverse transcrip	c 372	15.2	1.1	21	1	ADF40331	Human PRO 362 Tagm
c 300	15.2	1.1	21	1	AAQ75628	Reverse transcrip	c 373	15.2	1.1	21	1	ADF46127	Human PRO 362 Tagm
c 301	15.2	1.1	21	1	AAQ75636	Reverse transcrip	c 374	15.2	1.1	21	1	ADF24523	Human PRO 362 Tagm
c 302	15.2	1.1	21	1	AAQ75714	Reverse transcrip	c 375	15.2	1.1	21	1	ADF40955	Human PRO 362 Tagm
c 303	15.2	1.1	21	1	AAQ75760	Reverse transcrip	c 376	15.2	1.1	21	1	ADF23899	Human PRO 362 Tagm
c 304	15.2	1.1	21	1	AAQ75632	Reverse transcrip	c 377	15.2	1.1	21	1	ADF33882	Human PRO 362 Tagm
c 305	15.2	1.1	21	1	AAQ75692	Reverse transcrip	c 378	15.2	1.1	21	1	ADF27349	Human PRO 362 Tagm
c 306	15.2	1.1	21	1	AAQ75712	Reverse transcrip	c 379	15.2	1.1	21	1	ADF27985	Human PRO 362 Tagm
c 307	15.2	1.1	21	1	AAQ75756	Reverse transcrip	c 380	15.2	1.1	21	1	ADF41579	Human PRO 362 Tagm
c 308	15.2	1.1	21	1	AAQ75698	Reverse transcrip	c 381	15.2	1.1	21	1	ADF33258	Human PRO 362 Tagm
c 309	15.2	1.1	21	1	AAQ75751	Reverse transcrip	c 382	15.2	1.1	21	1	ADF25624	Human PRO 362 Tagm
c 310	15.2	1.1	21	1	AAQ75754	Reverse transcrip	c 383	15.2	1.1	21	1	ADF26725	Human PRO 362 Tagm
c 311	15.2	1.1	21	1	AAQ75759	Reverse transcrip	c 384	15.2	1.1	21	1	ADF34514	Human PRO 362 Tagm
c 312	15.2	1.1	21	1	AAQ75644	Reverse transcrip	c 385	15.2	1.1	21	1	ADF46751	Human PRO 362 Tagm
c 313	15.2	1.1	21	1	AAQ75679	Reverse transcrip	c 386	15.2	1.1	21	1	ADG50737	Human PRO 362 Tagm
c 314	15.2	1.1	21	1	AAQ75707	Reverse transcrip	c 387	15.2	1.1	21	1	ADG50113	Human PRO 362 Tagm
c 315	15.2	1.1	21	1	AAQ75755	Reverse transcrip	c 388	15.2	1.1	21	1	ADG51985	Human PRO 362 Tagm
c 316	15.2	1.1	21	1	AAQ75696	Reverse transcrip	c 389	15.2	1.1	21	1	ADG49489	Human PRO 362 Tagm
c 317	15.2	1.1	21	1	AAQ75712	Reverse transcrip	c 390	15.2	1.1	21	1	ADG44865	Human PRO 362 Tagm
c 318	15.2	1.1	21	1	AAQ75711	Reverse transcrip	c 391	15.2	1.1	21	1	ADG51361	Human PRO 362 Tagm
c 319	15.2	1.1	21	1	AAQ79067	T84 target specifc	c 392	15.2	1.1	21	1	ADG59305	Human PRO 362 Tagm
c 320	15.2	1.1	21	1	AAV30293	SUP-1 family toxin	c 393	15.2	1.1	21	1	ADG62761	Human PRO 362 Tagm
c 321	15.2	1.1	21	1	AAV32912	Bovine lactoferrin	c 394	15.2	1.1	21	1	ADM17563	Human PRO 362 Tagm
c 322	15.2	1.1	21	1	AACT8935	Human PRO362 hybr	c 395	15.2	1.1	21	1	ADJ07397	Human PRO 362 Tagm
c 323	15.2	1.1	21	1	AACT58192	Human PRO362 hybr	c 396	15.2	1.1	21	1	ADP86142	CpG immunostimulat
c 324	15.2	1.1	21	1	AAH91826	Human inflammatory	c 397	15.2	1.1	21	1	ADQ003034	ALDH2 A type detec
c 325	15.2	1.1	21	1	AAAD23640	Human CYP2D6 exon	c 398	15.2	1.1	25	1	AAH39959	SNP specific SNPE

C 399	15	1.1	17	1	Human flt1 VEGF re	472	14.8	1.1	18	1	ADA27361	Human microsatelli
C 400	15	1.1	17	1	Human flt1 VEGF re	C 473	14.8	1.1	18	1	AAD57871	Antisense oligo #1
C 401	15	1.1	17	1	Huntington's disea	C 474	14.8	1.1	18	1	AAD57878	Antisense DNA-RNA
C 402	15	1.1	17	1	Human AMLPLA scan	C 475	14.8	1.1	18	1	AAD57879	Antisense DNA-RNA
C 403	15	1.1	17	1	Human AMLPLA scan	C 476	14.8	1.1	18	1	AAD57877	Antisense DNA-RNA
C 404	15	1.1	17	1	Human AMLPLA scan	C 477	14.8	1.1	18	1	AAD57890	Target RNA #1 used
C 405	15	1.1	17	1	Human AMLPLA scan	C 478	14.8	1.1	18	1	ADB37210	Immunostimulatory
C 406	15	1.1	18	1	Oligonucleotide co	C 479	14.8	1.1	18	1	ADB37236	Immunostimulatory
C 407	15	1.1	18	1	Oligonucleotide #1	C 480	14.8	1.1	18	1	ADB7617	Human probe NEG fo
C 408	15	1.1	18	1	Huntington's disea	C 481	14.8	1.1	18	1	AD134489	Nucleotide sequenc
C 409	15	1.1	18	1	Huntington's disea	C 482	14.8	1.1	18	1	ADH78590	Test element oligo
C 410	15	1.1	19	1	(-)-lilmone-6-hyd	C 483	14.8	1.1	18	1	ADO28710	Single stranded cd
C 411	15	1.1	19	1	primer HOOK for CD	C 484	14.8	1.1	18	1	ADO28711	Single stranded cd
C 412	15	1.1	19	1	3' sequencing prim	C 485	14.8	1.1	18	1	ADO26654	Synthetic leader s
C 413	15	1.1	19	1	Mouse total gene e	C 486	14.8	1.1	18	1	ADO26684	Synthetic leader s
C 414	15	1.1	19	1	Spearmint (-)-lilmo	C 487	14.8	1.1	18	1	ADO26616	Synthetic leader s
C 415	15	1.1	19	1	r solium 10kDa ant	C 488	14.8	1.1	18	1	ADO26612	Synthetic leader s
C 416	15	1.1	19	1	Mouse microglia an	C 489	14.8	1.1	18	1	ADO26682	Synthetic leader s
C 417	15	1.1	19	1	CNS related 3' seq	C 490	14.8	1.1	18	1	ADO26682	Synthetic leader s
C 418	15	1.1	19	1	Rabbit atheroscler	C 491	14.8	1.1	18	1	ADP44333	Arabiolipais DNA PC
C 419	15	1.1	19	1	PCR primer #4 used	C 492	14.8	1.1	18	1	ADP86130	CPG immunostimulat
C 420	15	1.1	19	1	HOOK PCR primer us	C 493	14.8	1.1	19	1	AAQ20029	Cross-linking olig
C 421	15	1.1	19	1	Human MLH1 DNA mis	C 494	14.8	1.1	19	1	AAQ30373	Oligomer HUM beta
C 422	15	1.1	19	1	Reverse transcript	C 495	14.8	1.1	19	1	AAQ30375	Oligomer HUM beta
C 423	15	1.1	19	1	M13 sequencing prim	C 496	14.8	1.1	19	1	AAQ75553	Reverse transcript
C 424	15	1.1	19	1	3' sequencing prim	C 497	14.8	1.1	19	1	AAQ75551	Reverse transcript
C 425	15	1.1	19	1	Human PRDI-BP1 RT-	C 498	14.8	1.1	19	1	AAQ75554	Reverse transcript
C 426	15	1.1	19	1	DNA oligo (30) use	C 499	14.8	1.1	19	1	AAT10757	Oligonucleotide pr
C 427	15	1.1	19	1	Intestinal epithel	C 500	14.8	1.1	19	1	AAV07878	Aminooxy-modified
C 428	15	1.1	20	1	Oligonucleotide 9	C 501	14.8	1.1	19	1	AAV06820	Oligonucleotide co
C 429	15	1.1	20	1	Human biallelic ma	C 502	14.8	1.1	19	1	AAV83316	5' amino oligonuc
C 430	15	1.1	20	1	Human S-9 derived	C 503	14.8	1.1	19	1	AAV02601	PCR primer #32. S
C 431	15	1.1	20	1	Mouse RAIPD antis	C 504	14.8	1.1	19	1	AAV81927	Polynucleotide str
C 432	15	1.1	20	1	Human RAIPD antis	C 505	14.8	1.1	19	1	AAZ01369	PCR primer for PGI
C 433	15	1.1	20	1	Human RAIPD antis	C 506	14.8	1.1	19	1	AAZ61390	Uniform phosphodie
C 434	15	1.1	20	1	AI128305-derived o	C 507	14.8	1.1	19	1	AAZ61404	2'-O-modified ribo
C 435	15	1.1	20	1	Sheep prion protei	C 508	14.8	1.1	19	1	AAZ61404	T19 diester for us
C 436	15	1.1	21	1	Cow prion protein	C 509	14.8	1.1	19	1	AAZ62422	Cdc 25 he ribozyme
C 437	15	1.1	21	1	Locked nucleic aci	C 510	14.8	1.1	19	1	AAA86030	Human biallelic ma
C 438	15	1.1	21	1	Oligonucleotide.	C 511	14.8	1.1	19	1	AAZ72936	Arabiolipais thalia
C 439	15	1.1	21	1	Oreochromis niloti	C 512	14.8	1.1	19	1	AAZ95241	Modified oligonuc
C 440	15	1.1	24	1	Cow prion protein	C 513	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 441	15	1.1	24	1	RT-PCR primer #1 f	C 514	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 442	15	1.1	24	1	Sequence of a micr	C 515	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 443	15	1.1	24	1	PCR primer. Synth	C 516	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 444	15	1.1	24	1	Anchored poly(T) o	C 517	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 445	15	1.1	24	1	Delta-9 desaturase	C 518	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 446	15	1.1	24	1	Delta-9 desaturase	C 519	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 447	15	1.1	24	1	Nuclease resistant	C 520	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 448	15	1.1	24	1	Primer SEQ ID NO:3	C 521	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 449	15	1.1	24	1	Primer SEQ ID NO:2	C 522	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 450	15	1.1	24	1	RT-PCR primer of t	C 523	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 451	15	1.1	24	1	Oligoarabinonucleo	C 524	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 452	15	1.1	24	1	Oligoarabinonucleo	C 525	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 453	15	1.1	24	1	Deoxyarabinonucleo	C 526	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 454	15	1.1	24	1	Deoxyarabinonucleo	C 527	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 455	15	1.1	24	1	Antisense oligonuc	C 528	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 456	15	1.1	24	1	Oligonucleotide #6	C 529	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 457	15	1.1	24	1	Oligonucleotide A1	C 530	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 458	15	1.1	24	1	Immunostimulatory	C 531	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 459	15	1.1	24	1	Immunostimulatory	C 532	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 460	15	1.1	24	1	Phagemid vector PC	C 533	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 461	15	1.1	24	1	Nucleotide sequenc	C 534	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 462	15	1.1	24	1	Rat secreted facto	C 535	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 463	15	1.1	24	1	Angiogenesis inh	C 536	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 464	15	1.1	24	1	Angiogenesis inh	C 537	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 465	15	1.1	24	1	Immunostimulatory	C 538	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 466	15	1.1	24	1	Oligonucleotide us	C 539	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 467	15	1.1	24	1	Poly d(T) primer.	C 540	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 468	15	1.1	24	1	Adaptor oligonucle	C 541	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 469	15	1.1	24	1	Target RNA #1 used	C 542	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 470	15	1.1	24	1	Antisense oligo #1	C 543	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 471	15	1.1	24	1	2'-F-ANA antisense	C 544	14.8	1.1	19	1	AAZ95240	Modified oligonuc
C 472	15	1.1	24	1	Immunostimulatory	C 545	14.8	1.1	19	1	AAZ95240	Modified oligonuc



C 545	14.8	1.1	19	1	AAD2011	Oligonucleotide #1	C 618	14.8	1.1	20	1	AAC87230	Digoxigenin-label1
C 546	14.8	1.1	19	1	AAD2005	Oligonucleotide #8	C 619	14.8	1.1	20	1	AAC87241	Poly T oligonucleo
C 547	14.8	1.1	19	1	AAD2003	Oligonucleotide #6	C 620	14.8	1.1	20	1	AA510402	DNA template for 3
C 548	14.8	1.1	19	1	AAD4198	Oligonucleotide #1	C 621	14.8	1.1	20	1	AAD16997	Capture probe CPS'
C 549	14.8	1.1	19	1	AAD4199	Oligonucleotide #2	C 622	14.8	1.1	20	1	AA44607	Novel mouse protei
C 550	14.8	1.1	19	1	AAD42009	Oligonucleotide #1	C 623	14.8	1.1	20	1	AA660896	Conjugate forming
C 551	14.8	1.1	19	1	AB275398	Synthetic nuclease	C 624	14.8	1.1	20	1	AA563428	Oligonucleotide-na
C 552	14.8	1.1	19	1	AB275399	Synthetic nuclease	C 625	14.8	1.1	20	1	AA268481	Random oligonucleo
C 553	14.8	1.1	19	1	AB258336	Oligonucleotide wi	C 626	14.8	1.1	20	1	AA510371	Oligonucleotide-cy
C 554	14.8	1.1	19	1	AD335957	Human VEGFR1 short	C 627	14.8	1.1	20	1	AA699427	Immunostimulatory
C 555	14.8	1.1	19	1	AD336384	Human VEGFR1 short	C 628	14.8	1.1	20	1	AA699099	Immunostimulatory
C 556	14.8	1.1	19	1	AD292445	Modified oligomer1	C 629	14.8	1.1	20	1	AA699431	Immunostimulatory
C 557	14.8	1.1	19	1	AD292465	Modified oligomer1	C 630	14.8	1.1	20	1	AA441331	Universal stem cel
C 558	14.8	1.1	19	1	AD293976	Human breakpoint c	C 631	14.8	1.1	20	1	AA441333	Universal stem cel
C 559	14.8	1.1	19	1	AD293976	Human breakpoint c	C 632	14.8	1.1	20	1	AA446465	Oligonucleotide #1
C 560	14.8	1.1	19	1	AD293976	Oligo dt primer to	C 633	14.8	1.1	20	1	AA446465	Nucleotide sequenc
C 561	14.8	1.1	19	1	AD293976	Synthetically modi	C 634	14.8	1.1	20	1	AA28351	DNA oligomer #1.
C 562	14.8	1.1	19	1	AD293976	Synthetically modi	C 635	14.8	1.1	20	1	AA504113	Human SCF (stem ce
C 563	14.8	1.1	19	1	AD293976	Synthetically modi	C 636	14.8	1.1	20	1	AA504111	Human SCF (stem ce
C 564	14.8	1.1	19	1	AD293976	Mouse Na+-dependen	C 637	14.8	1.1	20	1	AA689091	Mammalian stem cel
C 565	14.8	1.1	19	1	AD293976	Human TGF- $\beta$ siRNA	C 638	14.8	1.1	20	1	AA689093	Mammalian stem cel
C 566	14.8	1.1	19	1	AD293976	Human TGF- $\beta$ siRNA	C 639	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 567	14.8	1.1	19	1	AD293976	Human TGF- $\beta$ siRNA	C 640	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 568	14.8	1.1	19	1	AD293976	Human HER2 (EGFR2)	C 641	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 569	14.8	1.1	19	1	AD293976	Human HER2 (EGFR2)	C 642	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 570	14.8	1.1	19	1	AD293976	Modified oligonucle	C 643	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 571	14.8	1.1	19	1	AD293976	Modified oligonucle	C 644	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 572	14.8	1.1	19	1	AD293976	Oligonucleotide #3	C 645	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 573	14.8	1.1	19	1	AD293976	Oligonucleotide #1	C 646	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 574	14.8	1.1	19	1	AD293976	Oligonucleotide #5	C 647	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 575	14.8	1.1	19	1	AD293976	Guanidinium functi	C 648	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 576	14.8	1.1	19	1	AD293976	Guanidinium functi	C 649	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 577	14.8	1.1	19	1	AD293976	Guanidinium functi	C 650	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 578	14.8	1.1	19	1	AD293976	Modified antisense	C 651	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 579	14.8	1.1	19	1	AD293976	Modified antisense	C 652	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 580	14.8	1.1	19	1	AD293976	Exemplary DNA mole	C 653	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 581	14.8	1.1	19	1	AD293976	2'-O-MOE-2-thio mo	C 654	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 582	14.8	1.1	19	1	AD293976	Oligonucleotide #4	C 655	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 583	14.8	1.1	19	1	AD293976	Oligo, to illustrate	C 656	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 584	14.8	1.1	19	1	AD293976	Tobacco cytochrome	C 657	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 585	14.8	1.1	19	1	AD293976	Tobacco cytochrome	C 658	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 586	14.8	1.1	19	1	AD293976	Dye-coupled 3'-anti	C 659	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 587	14.8	1.1	19	1	AD293976	Cross-linking olig	C 660	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 588	14.8	1.1	19	1	AD293976	Microsatellite seq	C 661	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 589	14.8	1.1	19	1	AD293976	Oligomer RSV411 fo	C 662	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 590	14.8	1.1	19	1	AD293976	Cytochrome P450 se	C 663	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 591	14.8	1.1	19	1	AD293976	Sequence of synthe	C 664	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 592	14.8	1.1	19	1	AD293976	Alpha-anomeric oli	C 665	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 593	14.8	1.1	19	1	AD293976	Reverse transcript	C 666	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 594	14.8	1.1	19	1	AD293976	Reverse transcript	C 667	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 595	14.8	1.1	19	1	AD293976	Reverse transcript	C 668	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 596	14.8	1.1	19	1	AD293976	Reverse transcript	C 669	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 597	14.8	1.1	19	1	AD293976	Reverse transcript	C 670	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 598	14.8	1.1	19	1	AD293976	Reverse transcript	C 671	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 599	14.8	1.1	19	1	AD293976	Reverse transcript	C 672	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 600	14.8	1.1	19	1	AD293976	Reverse transcript	C 673	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 601	14.8	1.1	19	1	AD293976	T2 (synthetic DNA	C 674	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 602	14.8	1.1	19	1	AD293976	Mammalian stem cel	C 675	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 603	14.8	1.1	19	1	AD293976	Mammalian stem cel	C 676	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 604	14.8	1.1	19	1	AD293976	Primer from J09248	C 677	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 605	14.8	1.1	19	1	AD293976	Anti-HTLV antisens	C 678	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 606	14.8	1.1	19	1	AD293976	M. vaccae antigeni	C 679	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 607	14.8	1.1	19	1	AD293976	PTPR gene specifi	C 680	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 608	14.8	1.1	19	1	AD293976	Oligonucleotide se	C 681	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 609	14.8	1.1	19	1	AD293976	Synthetic RNA sequ	C 682	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 610	14.8	1.1	19	1	AD293976	Myobacterial 16S	C 683	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 611	14.8	1.1	19	1	AD293976	Electrochemical det	C 684	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 612	14.8	1.1	19	1	AD293976	Electrochemical det	C 685	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 613	14.8	1.1	19	1	AD293976	Stem cell factor u	C 686	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 614	14.8	1.1	19	1	AD293976	Stem cell factor u	C 687	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 615	14.8	1.1	19	1	AD293976	Oligonucleotide #5	C 688	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 616	14.8	1.1	19	1	AD293976	2'-Methoxyethoxy-m	C 689	14.8	1.1	20	1	AA689093	Human SCF (stem ce
C 617	14.8	1.1	19	1	AD293976	Phosphorothioate p	C 690	14.8	1.1	20	1	AA689093	Human SCF (stem ce

691	14.8	1.1	20	1	AAD64709	Coadsorbed diluent
692	14.8	1.1	20	1	ADF65590	Nanotechnology nuc
693	14.8	1.1	20	1	ADG32620	Murine rRPV trans
694	14.8	1.1	20	1	ADH59608	Non-nucleotide pro
695	14.8	1.1	20	1	ADH59620	Non-nucleotide pro
696	14.8	1.1	20	1	ABZ88267	Human oligonucleot
697	14.8	1.1	20	1	ABZ88565	Human oligonucleot
698	14.8	1.1	20	1	ABZ88619	Human oligonucleot
699	14.8	1.1	20	1	ABZ88266	Human oligonucleot
700	14.8	1.1	20	1	ABZ88705	Human oligonucleot
701	14.8	1.1	20	1	ABZ88816	Human oligonucleot
702	14.8	1.1	20	1	ABZ88881	Human oligonucleot
703	14.8	1.1	20	1	ABZ89706	Human oligonucleot
704	14.8	1.1	20	1	ABZ88620	Human oligonucleot
705	14.8	1.1	20	1	ABZ88814	Human oligonucleot
706	14.8	1.1	20	1	ABZ89241	Human oligonucleot
707	14.8	1.1	20	1	ABZ90650	Human oligonucleot
708	14.8	1.1	20	1	ABZ99050	Human PDE4C oligon
709	14.8	1.1	20	1	ABZ88618	Human oligonucleot
710	14.8	1.1	20	1	ABZ88815	Human oligonucleot
711	14.8	1.1	20	1	ABZ88620	Human oligonucleot
712	14.8	1.1	20	1	ABZ85311	Human oligonucleot
713	14.8	1.1	20	1	ABZ85435	Human oligonucleot
714	14.8	1.1	20	1	ABZ88817	Human oligonucleot
715	14.8	1.1	20	1	ABZ88939	Human oligonucleot
716	14.8	1.1	20	1	ABZ89302	Human oligonucleot
717	14.8	1.1	20	1	ABZ87681	Human oligonucleot
718	14.8	1.1	20	1	ABZ88566	Human oligonucleot
719	14.8	1.1	20	1	ABZ89085	Human oligonucleot
720	14.8	1.1	20	1	ABZ92864	Human oligonucleot
721	14.8	1.1	20	1	ABZ85533	Human oligonucleot
722	14.8	1.1	20	1	ABZ85915	Human oligonucleot
723	14.8	1.1	20	1	ABZ89015	Human oligonucleot
724	14.8	1.1	20	1	ABZ89441	Human oligonucleot
725	14.8	1.1	20	1	ABZ88535	Human oligonucleot
726	14.8	1.1	20	1	ABZ88445	Human oligonucleot
727	14.8	1.1	20	1	ABZ88445	Human oligonucleot
728	14.8	1.1	20	1	ABZ89016	Human oligonucleot
729	14.8	1.1	20	1	ABZ89120	Human oligonucleot
730	14.8	1.1	20	1	ABZ89704	Human oligonucleot
731	14.8	1.1	20	1	ACD27320	Nanotechnology nuc
732	14.8	1.1	20	1	ACC58867	Doubly labelled DN
733	14.8	1.1	20	1	ABZ22916	Phosphorothioate 2
734	14.8	1.1	20	1	ABD24497	AI128301-derived o
735	14.8	1.1	20	1	ABD25047	AI128305-derived o
736	14.8	1.1	20	1	ABD25315	AI092429-derived o
737	14.8	1.1	20	1	ABD25316	AI092429-derived o
738	14.8	1.1	20	1	ABD21763	Human stannocalci
739	14.8	1.1	20	1	ABD25246	AI051839-derived o
740	14.8	1.1	20	1	ABD24848	AI092623-derived o
741	14.8	1.1	20	1	AI092623-derived o	Human stannocalci
742	14.8	1.1	20	1	ABD21665	AI122689-derived o
743	14.8	1.1	20	1	ABD24796	AI122689-derived o
744	14.8	1.1	20	1	ABD25045	AI128305-derived o
745	14.8	1.1	20	1	ABD25350	AI096522-derived o
746	14.8	1.1	20	1	ABD25245	AI051839-derived o
747	14.8	1.1	20	1	ABD25169	AI041482-derived o
748	14.8	1.1	20	1	ABD25471	AI041212-derived o
749	14.8	1.1	20	1	ABD24795	AI122689-derived o
750	14.8	1.1	20	1	ABD25934	AI0505075-derived o
751	14.8	1.1	20	1	ABD25935	AA505075-derived o
752	14.8	1.1	20	1	ABD25936	AA505075-derived o
753	14.8	1.1	20	1	ABD32081	Human PDE4C-deriv
754	14.8	1.1	20	1	ABD21541	SI00 calicium bindi
755	14.8	1.1	20	1	ABD25571	AI024215-derived o
756	14.8	1.1	20	1	ABD21765	Human stannocalci
757	14.8	1.1	20	1	ABD24675	AA281534-derived o
758	14.8	1.1	20	1	ABD26880	AA278764-derived o
759	14.8	1.1	20	1	ABD24850	AI092623-derived o
760	14.8	1.1	20	1	ABD22850	Human myosin X-der
761	14.8	1.1	20	1	ABD24496	AI1252901-derived o
762	14.8	1.1	20	1	ABD25532	AI125651-derived o
763	14.8	1.1	20	1	ABD25046	AI128305-derived o
764	14.8	1.1	20	1	ABD29094	AA679352-derived o
765	14.8	1.1	20	1	ABD21825	Human stannocalci
766	14.8	1.1	20	1	ABD23911	Human calmodulin 2
767	14.8	1.1	20	1	ABD25044	AI128305-derived o
768	14.8	1.1	20	1	ABD25111	AI125292-derived o
769	14.8	1.1	20	1	ADH08684	Nanotechnology nuc
770	14.8	1.1	20	1	ADH08814	Nanotechnology nuc
771	14.8	1.1	20	1	ADH08749	Nanotechnology nuc
772	14.8	1.1	20	1	ADH65941	Human glucocortic
773	14.8	1.1	20	1	ADH67409	Human glucocortic
774	14.8	1.1	20	1	AD134492	Nucleotide sequenc
775	14.8	1.1	20	1	AD147212	Molecule analysing
776	14.8	1.1	20	1	ADJ51142	Polyalkyleneamine-
777	14.8	1.1	20	1	ADK98410	Primer of the live
778	14.8	1.1	20	1	ADJ60935	Oligonucleotide as
779	14.8	1.1	20	1	AD132920	as Oligo related to
780	14.8	1.1	20	1	AD132905	5' mRNA DNA prepar
781	14.8	1.1	20	1	ADK70840	Sulphurated oligon
782	14.8	1.1	20	1	ADK69880	Sulphurated oligon
783	14.8	1.1	20	1	ADK69885	Chimeric phosphoro
784	14.8	1.1	20	1	ADK74647	Chimeric phosphoro
785	14.8	1.1	20	1	ADK74188	Chimeric phosphoro
786	14.8	1.1	20	1	ADK74838	Chimeric phosphoro
787	14.8	1.1	20	1	ADK75847	Chimeric phosphoro
788	14.8	1.1	20	1	ADK79524	Chimeric phosphoro
789	14.8	1.1	20	1	ADK74688	Chimeric phosphoro
790	14.8	1.1	20	1	ADK74889	Chimeric phosphoro
791	14.8	1.1	20	1	ADK80788	Chimeric phosphoro
792	14.8	1.1	20	1	ADK74838	Chimeric phosphoro
793	14.8	1.1	20	1	ADK77218	Chimeric phosphoro
794	14.8	1.1	20	1	ADK80450	Chimeric phosphoro
795	14.8	1.1	20	1	ADK69507	Plant gene polymer
796	14.8	1.1	20	1	ADK69506	Plant gene polymer
797	14.8	1.1	20	1	ADL33726	INA oligomer #5.
798	14.8	1.1	20	1	ADL59686	Human ESM-1 antis
799	14.8	1.1	20	1	ADL59703	Human ESM-1 antis
800	14.8	1.1	20	1	ADL59724	Human ESM-1 antis
801	14.8	1.1	20	1	ADK93653	Human NOVA PCR pr
802	14.8	1.1	20	1	ADK13992	Human mPES-1 chim
803	14.8	1.1	20	1	ADK13994	Human mPES-1 chim
804	14.8	1.1	20	1	ADK13999	Human mPES-1 chim
805	14.8	1.1	20	1	ADK14002	Human mPES-1 chim
806	14.8	1.1	20	1	ADK14008	Human mPES-1 chim
807	14.8	1.1	20	1	ADK14257	Human mPES-1 chim
808	14.8	1.1	20	1	ADK14151	Human mPES-1 chim
809	14.8	1.1	20	1	ADK13997	Human mPES-1 chim
810	14.8	1.1	20	1	ADK14017	Human mPES-1 chim
811	14.8	1.1	20	1	ADK14018	Human mPES-1 chim
812	14.8	1.1	20	1	ADK14088	Human mPES-1 chim
813	14.8	1.1	20	1	ADK14257	Human mPES-1 chim
814	14.8	1.1	20	1	ADK14000	Human mPES-1 chim
815	14.8	1.1	20	1	ADK14006	Human mPES-1 chim
816	14.8	1.1	20	1	ADK14014	Human mPES-1 chim
817	14.8	1.1	20	1	ADK14020	Human mPES-1 chim
818	14.8	1.1	20	1	ADK13991	Human mPES-1 chim
819	14.8	1.1	20	1	ADK14003	Human mPES-1 chim
820	14.8	1.1	20	1	ADK14005	Human mPES-1 chim
821	14.8	1.1	20	1	ADK14246	Human mPES-1 chim
822	14.8	1.1	20	1	ADK13995	Human mPES-1 chim
823	14.8	1.1	20	1	ADK14011	Human mPES-1 chim
824	14.8	1.1	20	1	ADK14240	Human mPES-1 chim
825	14.8	1.1	20	1	ADK14009	Human mPES-1 chim
826	14.8	1.1	20	1	ADK14010	Human mPES-1 chim
827	14.8	1.1	20	1	ADK14018	Human mPES-1 chim
828	14.8	1.1	20	1	ADK14016	Human mPES-1 chim
829	14.8	1.1	20	1	ADK14075	Human mPES-1 chim
830	14.8	1.1	20	1	ADK14189	Human mPES-1 chim
831	14.8	1.1	20	1	ADK13996	Human mPES-1 chim
832	14.8	1.1	20	1	ADK14001	Human mPES-1 chim
833	14.8	1.1	20	1	ADK14004	Human mPES-1 chim
834	14.8	1.1	20	1	ADK14012	Human mPES-1 chim
835	14.8	1.1	20	1	ADK14467	Human mPES-1 chim
836	14.8	1.1	20	1	ADK14015	Human mPES-1 chim

C 837	14.8	1.1	20	1	ADN14021	Human mPGES-1 chim	C 910	14.8	1.1	21	1	ADK01344	Rat DNA microarray
C 838	14.8	1.1	20	1	ADN14388	Human mPGES-1 chim	C 911	14.8	1.1	21	1	ADK01340	Rat DNA microarray
C 839	14.8	1.1	20	1	ADN14013	Human mPGES-1 chim	C 912	14.8	1.1	21	1	ADK01319	Rat DNA microarray
C 840	14.8	1.1	20	1	ADN14019	Human mPGES-1 chim	C 913	14.8	1.1	21	1	ADK01328	Rat DNA microarray
C 841	14.8	1.1	20	1	ADN14087	Human mPGES-1 chim	C 914	14.8	1.1	21	1	ADK01335	Rat DNA microarray
C 842	14.8	1.1	20	1	ADN14300	Human mPGES-1 chim	C 915	14.8	1.1	21	1	ADK01302	Rat DNA microarray
C 843	14.8	1.1	20	1	ADN13993	Human mPGES-1 chim	C 916	14.8	1.1	21	1	ADK01317	Rat DNA microarray
C 844	14.8	1.1	20	1	ADN13998	Human mPGES-1 chim	C 917	14.8	1.1	21	1	ADK01334	Rat DNA microarray
C 845	14.8	1.1	20	1	ADN14007	Human mPGES-1 chim	C 918	14.8	1.1	21	1	ADK01303	Rat DNA microarray
C 846	14.8	1.1	20	1	ADN14124	Human mPGES-1 chim	C 919	14.8	1.1	21	1	ADK01327	Rat DNA microarray
C 847	14.8	1.1	20	1	ADN14216	Human mPGES-1 chim	C 920	14.8	1.1	21	1	ADK01338	Rat DNA microarray
C 848	14.8	1.1	20	1	ADN046424	Human Oligonucleot	C 921	14.8	1.1	21	1	ADK01307	Rat DNA microarray
C 849	14.8	1.1	20	1	ADN03711	SERS-based analyte	C 922	14.8	1.1	21	1	ADK01320	Rat DNA microarray
C 850	14.8	1.1	20	1	ADP78301	Chimeric phosphoro	C 923	14.8	1.1	21	1	ADK01304	Rat DNA microarray
C 851	14.8	1.1	20	1	ADP10746	Set 1 left PCR pri	C 924	14.8	1.1	21	1	ADK01306	Rat DNA microarray
C 852	14.8	1.1	20	1	ADP20152	Nucleic acid detec	C 925	14.8	1.1	21	1	ADK01325	Rat DNA microarray
C 853	14.8	1.1	20	1	ADP20137	Nucleic acid detec	C 926	14.8	1.1	21	1	ADK01339	Rat DNA microarray
C 854	14.8	1.1	20	1	ADP69379	Human mltONEET-spe	C 927	14.8	1.1	21	1	ADK01343	Rat DNA microarray
C 855	14.8	1.1	20	1	ADP69506	Human mltONEET-spe	C 928	14.8	1.1	21	1	ADK01301	Rat DNA microarray
C 856	14.8	1.1	20	1	ADN080728	Porcine TSSC5 intr	C 929	14.8	1.1	21	1	ADK01312	Rat DNA microarray
C 857	14.8	1.1	20	1	ADP99304	Stem cell factor,	C 930	14.8	1.1	21	1	ADK01326	Rat DNA microarray
C 858	14.8	1.1	20	1	ADP99302	Stem cell factor,	C 931	14.8	1.1	21	1	ADK01305	Rat DNA microarray
C 859	14.8	1.1	21	1	AAQ75707	Reverse transcript	C 932	14.8	1.1	21	1	ADK01310	Rat DNA microarray
C 860	14.8	1.1	21	1	AAQ33789	Microsatellite seq	C 933	14.8	1.1	21	1	ADK01336	Rat DNA microarray
C 861	14.8	1.1	21	1	AAQ75702	Reverse transcript	C 934	14.8	1.1	21	1	ADK01342	Rat DNA microarray
C 862	14.8	1.1	21	1	AAQ75671	Reverse transcript	C 935	14.8	1.1	21	1	ADK01308	Rat DNA microarray
C 863	14.8	1.1	21	1	AAQ75675	Reverse transcript	C 936	14.8	1.1	21	1	ADK01311	Rat DNA microarray
C 864	14.8	1.1	21	1	AAQ75674	Reverse transcript	C 937	14.8	1.1	21	1	ADK01321	Rat DNA microarray
C 865	14.8	1.1	21	1	AAQ75687	Reverse transcript	C 938	14.8	1.1	21	1	ADK01322	Rat DNA microarray
C 866	14.8	1.1	21	1	AAQ75718	Reverse transcript	C 939	14.8	1.1	21	1	ADK01324	Rat DNA microarray
C 867	14.8	1.1	21	1	AAQ75690	Reverse transcript	C 940	14.8	1.1	21	1	ADN966107	Human ATP5F1 gene,
C 868	14.8	1.1	21	1	AAQ75678	Reverse transcript	C 941	14.8	1.1	21	1	ABD25907	Al54215-derived o
C 869	14.8	1.1	21	1	AAQ75688	Reverse transcript	C 942	14.8	1.1	21	1	ADJ88057	RT primer used in
C 870	14.8	1.1	21	1	AAQ75715	Reverse transcript	C 943	14.8	1.1	21	1	ADN07216	Control primer use
C 871	14.8	1.1	21	1	AAQ75686	Reverse transcript	C 944	14.8	1.1	21	1	ADP09287	Extend primer 82 u
C 872	14.8	1.1	21	1	AAQ75689	Reverse transcript	C 945	14.8	1.1	24	1	ABL60935	Human nucleotide r
C 873	14.8	1.1	21	1	AAQ75703	Reverse transcript	C 946	14.8	1.1	19	1	AA769640	Telomerase Oligo-d
C 874	14.8	1.1	21	1	AAQ75705	Reverse transcript	C 947	14.6	1.0	19	1	ADN16445	RNA intron poly-py
C 875	14.8	1.1	21	1	AAQ75672	Reverse transcript	C 948	14.6	1.0	21	1	AAQ75722	Reverse transcript
C 876	14.8	1.1	21	1	AAQ75706	Reverse transcript	C 949	14.6	1.0	21	1	AAQ75726	Reverse transcript
C 877	14.8	1.1	21	1	AAQ75685	Reverse transcript	C 950	14.6	1.0	21	1	AAQ75734	Reverse transcript
C 878	14.8	1.1	21	1	AAQ75699	Reverse transcript	C 951	14.6	1.0	21	1	AAQ75720	Reverse transcript
C 879	14.8	1.1	21	1	AAQ75704	Reverse transcript	C 952	14.6	1.0	21	1	ADK01285	Rat DNA microarray
C 880	14.8	1.1	21	1	AAQ75708	Reverse transcript	C 953	14.6	1.0	21	1	ADK01295	Rat DNA microarray
C 881	14.8	1.1	21	1	AAQ75717	Reverse transcript	C 954	14.6	1.0	21	1	AAQ75762	Reverse transcript
C 882	14.8	1.1	21	1	AAQ75673	Reverse transcript	C 955	14.6	1.0	21	1	AAQ75634	Reverse transcript
C 883	14.8	1.1	21	1	AAQ75677	Reverse transcript	C 956	14.6	1.0	21	1	AAQ75682	Reverse transcript
C 884	14.8	1.1	21	1	AAQ75683	Reverse transcript	C 957	14.6	1.0	21	1	AAQ75753	Reverse transcript
C 885	14.8	1.1	21	1	AAQ75710	Reverse transcript	C 958	14.6	1.0	21	1	AAQ75764	Reverse transcript
C 886	14.8	1.1	21	1	AAQ75701	Reverse transcript	C 959	14.6	1.0	21	1	AAQ75714	Reverse transcript
C 887	14.8	1.1	21	1	AAQ75709	Reverse transcript	C 960	14.6	1.0	21	1	AAQ75760	Reverse transcript
C 888	14.8	1.1	21	1	AAQ90391	Reverse transcript	C 961	14.6	1.0	21	1	AAQ75756	Reverse transcript
C 889	14.8	1.1	21	1	AAQ75698	Reverse transcript	C 962	14.6	1.0	21	1	AAQ75698	Reverse transcript
C 890	14.8	1.1	21	1	AAQ75743	Oligonucleotide pr	C 963	14.6	1.0	22	1	ABA93238	PolyA adaptor olig
C 891	14.8	1.1	21	1	AAQ75395	HIV-1 gag protein	C 964	14.6	1.0	24	1	AA166361	Human phosphatidy
C 892	14.8	1.1	21	1	AAQ75643	Human polymorphic	C 965	14.6	1.0	24	1	ABK86169	Oligo dt primer #2
C 893	14.8	1.1	21	1	AAQ75626	Human polymorphic	C 966	14.6	1.0	24	1	ABK86168	Oligo dt primer #1
C 894	14.8	1.1	21	1	AAQ75715	3' ribonucleoside	C 967	14.6	1.0	25	1	ADB04575	Human MDZ7 scanlin
C 895	14.8	1.1	21	1	AAQ75716	Human V3 loop HIV	C 968	14.4	1.0	16	1	AAQ75756	Sequence of human
C 896	14.8	1.1	21	1	AAQ75716	Polymorphic fragme	C 969	14.4	1.0	17	1	AAQ75756	Human filci VEGF re
C 897	14.8	1.1	21	1	AAQ75716	Primer used to rev	C 970	14.4	1.0	17	1	AAQ75756	Integrin alpha 6 s
C 898	14.8	1.1	21	1	AAQ75716	Protein kinase inh	C 971	14.4	1.0	17	1	AAQ75716	Integrin alpha 6 s
C 899	14.8	1.1	21	1	AAQ75716	Human ASTH1J 5' re	C 972	14.4	1.0	17	1	AAQ75716	Human C-rif target
C 900	14.8	1.1	21	1	AAQ75716	Oligonucleotide us	C 973	14.4	1.0	17	1	AAQ75716	SPI consensus bind
C 901	14.8	1.1	21	1	AAQ75716	Angiogenesis inh	C 974	14.4	1.0	17	1	AAQ75716	Oestrogen receptor
C 902	14.8	1.1	21	1	AAQ75716	Immunostimulatory	C 975	14.4	1.0	17	1	AAQ75716	Oestrogen receptor
C 903	14.8	1.1	21	1	AAQ75716	Human NADPH quin	C 976	14.4	1.0	17	1	AAQ75716	Hammerhead ribozym
C 904	14.8	1.1	21	1	AAQ75716	Regular oligo dt p	C 977	14.4	1.0	17	1	AAQ75716	Hammerhead ribozym
C 905	14.8	1.1	21	1	AAQ75716	Immunostimulatory	C 978	14.4	1.0	17	1	AAQ75716	Human GDMIP-1 17-m
C 906	14.8	1.1	21	1	AAQ75716	Immunostimulatory	C 979	14.4	1.0	17	1	AAQ75716	Human GDMIP-1 17-m
C 907	14.8	1.1	21	1	AAQ75716	Rat DNA microarray	C 980	14.4	1.0	17	1	AAQ75716	Human GDMIP-1 17-m
C 908	14.8	1.1	21	1	AAQ75716	Rat DNA microarray	C 981	14.4	1.0	17	1	AAQ75716	Human GDMIP-1 17-m
C 909	14.8	1.1	21	1	AAQ75716	Rat DNA microarray	C 982	14.4	1.0	17	1	AAQ75716	WNV minus strand Z

983	14.4	1.0	17	1	ACN01139	WNV Hammerhead Rib
C 984	14.4	1.0	17	1	ACN01209	WNV Hammerhead Rib
C 985	14.4	1.0	17	1	ACN14420	WNV minus strand A
986	14.4	1.0	17	1	ACN03016	WNV Inozyme subscr
C 987	14.4	1.0	17	1	ACN07859	WNV minus strand H
C 988	14.4	1.0	17	1	ABT36080	Tumour suppression
989	14.4	1.0	17	1	ABT35552	Tumour suppression
C 990	14.4	1.0	17	1	AB264551	Human HER2 DNAzyme
C 991	14.4	1.0	17	1	ACD60861	HCV DNAzyme subscr
C 992	14.4	1.0	17	1	ADBA4694	Tumour suppression
993	14.4	1.0	17	1	ACC54422	Human tumour suppress
C 994	14.4	1.0	17	1	AD184801	HCV DNAzyme subscr
C 995	14.4	1.0	18	1	AAH92546	Antisense oligonuc
C 996	14.4	1.0	18	1	AAH44097	Oryza sativa perox
C 997	14.4	1.0	18	1	ABS52682	mRNA display splin
998	14.4	1.0	18	1	AD120873	MS SNP detection
999	14.4	1.0	20	1	ADP84381	5' donor site at t
C1000	14.4	1.0	20	1	AAO68872	Oligonucleotide (S
C1001	14.4	1.0	20	1	AA203168	PCR primer used to
C1002	14.4	1.0	20	1	AAH97150	PCR primer used to
C1003	14.4	1.0	20	1	AAA55806	Human histone deac
C1004	14.4	1.0	20	1	AAZ75633	Human histone deac
C1005	14.4	1.0	20	1	ABL57552	Synthetic deoxyrib
C1006	14.4	1.0	20	1	AAH43116	Antisense oligo. t
C1007	14.4	1.0	20	1	AAH89545	Human HDAC-2 antis
C1008	14.4	1.0	20	1	AAH89536	Human HDAC-2 PCR p
C1009	14.4	1.0	20	1	AAH91976	Human inflammatory
C1010	14.4	1.0	20	1	AAH82913	Human beta-actin d
C1011	14.4	1.0	20	1	AAH050714	Aminopurine substi
C1012	14.4	1.0	20	1	ABA97637	Poly s nucleotide
C1013	14.4	1.0	20	1	ACF97337	Human atlastin exo
C1014	14.4	1.0	20	1	AB286068	Human oligonucleot
C1015	14.4	1.0	20	1	AB287682	Human oligonucleot
C1016	14.4	1.0	20	1	AB288879	Human oligonucleot
C1017	14.4	1.0	20	1	AB297707	Human CCR3 oligonu
C1018	14.4	1.0	20	1	AB293518	Human oligonucleot
C1019	14.4	1.0	20	1	AB289678	Human oligonucleot
C1020	14.4	1.0	20	1	AB293536	Human oligonucleot
C1021	14.4	1.0	20	1	AB288813	Human oligonucleot
C1022	14.4	1.0	20	1	AB286072	Human oligonucleot
C1023	14.4	1.0	20	1	ABD22398	Human stannocalci
C1024	14.4	1.0	20	1	ABD25043	Human stannocalci
C1025	14.4	1.0	20	1	ABD29766	A1128305-derived o
C1026	14.4	1.0	20	1	ABD23912	R37953-derived oli
C1027	14.4	1.0	20	1	ABD30738	Human calmodulin 2
C1028	14.4	1.0	20	1	ABD25109	Human CCR3-derived
C1029	14.4	1.0	20	1	ABD22302	A112528-derived o
C1030	14.4	1.0	20	1	ABD27748	Human stannocalci
C1031	14.4	1.0	20	1	ADJ59564	Oligonucleotide as
C1032	14.4	1.0	20	1	ADK80880	Chimeric phosphor
C1033	14.4	1.0	20	1	AD045054	Human oligonucleot
C1034	14.4	1.0	20	1	AD055869	Human NIMA-related
C1035	14.4	1.0	20	1	AD055807	Human NIMA-related
C1036	14.4	1.0	20	1	ADP20520	Transcription fact
C1037	14.4	1.0	20	1	ADP21858	Human ornithine de
C1038	14.4	1.0	19	1	AAQ75552	Reverse transcript
C1039	14.2	1.0	19	1	ADL79331	Human HER2 (EGFR2)
C1040	14.2	1.0	19	1	ADL79082	Human HER2 (EGFR2)
C1041	14.2	1.0	20	1	ABZ89546	Human oligonucleot
C1042	14.2	1.0	20	1	ABD25776	Human oligonucleot
C1043	14.2	1.0	20	1	AAQ75579	Reverse transcript
C1044	14.2	1.0	20	1	AAQ75582	Reverse transcript
C1045	14.2	1.0	20	1	AAQ75580	Reverse transcript
C1046	14.2	1.0	20	1	ABZ8694	Human oligonucleot
C1047	14.2	1.0	20	1	AAQ75596	Reverse transcript
C1048	14.2	1.0	20	1	AAQ75597	Reverse transcript
C1049	14.2	1.0	20	1	AAQ75595	Reverse transcript
C1050	14.2	1.0	20	1	ABZ85312	Human oligonucleot
C1051	14.2	1.0	20	1	ABD21542	SL100 calcium bindi
C1052	14.2	1.0	20	1	AAQ75586	Reverse transcript
C1053	14.2	1.0	20	1	AAQ75576	Reverse transcript
C1054	14.2	1.0	20	1	AAQ68872	Oligonucleotide (S
C1055	14.2	1.0	20	1	ACF57337	Human atlastin exo

## ALIGNMENTS

```

RESULT 1
AD136745/C
ID AD136745 standard; DNA, 20 BP.
AC AD136745;
XX
DT 15-APR-2004 (first entry)
XX
DE Human KOX 1 DNA, antisense oligonucleotide #15.
XX
KW Human; KOX 1; zinc finger protein 10; antisense therapy;
KW hyperproliferative disorder; cancer; viral infection;
KW bacterial infection; hyperactivation; immune response; cytostatic;
KW virocid; antibacterial; immunosuppressive; phosphorothioate; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX US200232438-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX PI Dobie KM, Freier SM;
XX
XX WPI; 2004-052172/05.
XX
XX New antisense oligonucleotide targeted to a nucleic acid encoding KOX 1,
XX useful for treating cancer, viral or bacterial infections or a disease
XX involving hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 27; 80pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding human KOX 1 (zinc finger protein 10). The antisense
XX compound comprises an antisense oligonucleotide that specifically
XX hybridises with the nucleic acid and inhibits the expression of KOX 1.
XX The antisense oligonucleotide is a chimeric oligonucleotide. The
XX linkage, preferably a phosphorothioate linkage. It also comprises at
XX least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX sugar moiety. The antisense oligonucleotide further comprises at least
XX one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX hyperproliferative disorders, e.g. cancer, viral or bacterial infections,
XX and diseases involving hyperactivation of an immune response. The present
XX sequence represents an antisense oligonucleotide used in the examples of
XX the present invention.
XX
XX Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.4%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 29;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```
OY 767 TCGAACCTTCTAGTGCTTA 786
   |||||||
   |||||||
Db 20 TCGAACCTTCTAGTGCTTA 1

RESULT 2
AD136814
ID AD136814 standard; DNA; 20 BP.
XX
XX AD136814;
XX
XX 15-APR-2004 (first entry)
XX
XX Human KOX 1 DNA target sequence #6.
XX
XX Human; KOX 1; zinc finger protein 10; antisense therapy;
XX hyperproliferative disorder; cancer; viral infection;
XX bacterial infection; hyperactivation; immune response; cytostatic;
XX virucide; antibacterial; immunosuppressive; ds.
XX
XX Homo sapiens.
XX
XX US2003232438-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KM, Freier SM;
XX
XX WPI; 2004-052172/05.
XX
XX New antisense oligonucleotide targeted to a nucleic acid encoding KOX 1,
XX useful for treating cancer, viral or bacterial infections or a disease
XX involving hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 96; 80pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding human KOX 1 (zinc finger protein 10). The antisense
XX compound comprises an antisense oligonucleotide that specifically
XX hybridises with the nucleic acid and inhibits the expression of KOX 1.
XX The antisense oligonucleotide is a chimeric oligonucleotide. The
XX antisense oligonucleotide comprises at least one modified internucleoside
XX linkage, preferably a phosphorothioate linkage. It also comprises at
XX least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX sugar moiety. The antisense oligonucleotide further comprises at least
XX one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX hyperproliferative disorders, e.g. cancer, viral or bacterial infections,
XX and diseases involving hyperactivation of an immune response. The present
XX sequence represents a human KOX 1 DNA target sequence for an antisense
XX oligonucleotide.
XX
XX Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
XX

Query Match 1.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
AC AD136828;
XX
XX 15-APR-2004 (first entry)
XX
XX Human KOX 1 DNA target sequence #20.
XX
XX Human; KOX 1; zinc finger protein 10; antisense therapy;
XX hyperproliferative disorder; cancer; viral infection;
XX bacterial infection; hyperactivation; immune response; cytostatic;
XX virucide; antibacterial; immunosuppressive; ds.
XX
XX Homo sapiens.
XX
XX US2003232438-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KM, Freier SM;
XX
XX WPI; 2004-052172/05.
XX
XX New antisense oligonucleotide targeted to a nucleic acid encoding KOX 1,
XX useful for treating cancer, viral or bacterial infections or a disease
XX involving hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 110; 80pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding human KOX 1 (zinc finger protein 10). The antisense
XX compound comprises an antisense oligonucleotide that specifically
XX hybridises with the nucleic acid and inhibits the expression of KOX 1.
XX The antisense oligonucleotide is a chimeric oligonucleotide. The
XX antisense oligonucleotide comprises at least one modified internucleoside
XX linkage, preferably a phosphorothioate linkage. It also comprises at
XX least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX sugar moiety. The antisense oligonucleotide further comprises at least
XX one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX hyperproliferative disorders, e.g. cancer, viral or bacterial infections,
XX and diseases involving hyperactivation of an immune response. The present
XX sequence represents a human KOX 1 DNA target sequence for an antisense
XX oligonucleotide.
XX
XX Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
XX

Query Match 1.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY 767 TCGAACCTTCTAGTGCTTA 786
   |||||||
   |||||||
Db 1 TCGAACCTTCTAGTGCTTA 20

RESULT 3
AD136828
ID AD136828 standard; DNA; 20 BP.
XX
```

```
AD136744/C
ID AD136744 standard; DNA; 20 BP.
XX
XX AD136744;
XX
XX 15-APR-2004 (first entry)
XX
XX Human KOX 1 DNA, antisense oligonucleotide #14.
XX
XX Human; KOX 1; zinc finger protein 10; antisense therapy;
XX hyperproliferative disorder; cancer; viral infection;
XX bacterial infection; hyperactivation; immune response; cytostatic;
```

```
KM virucide; antibacterial; immunosuppressive; phosphorothioate; ss.
XX
XX Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX US2003232438-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KM, Freier SM;
XX
XX WPI; 2004-052172/05.
XX
XX New antisense oligonucleotide targeted to a nucleic acid encoding Kox 1,
XX useful for treating cancer, viral or bacterial infections or a disease
XX involving hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 26; 80pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding human Kox 1 (zinc finger protein 10). The antisense
XX compound comprises an antisense oligonucleotide that specifically
XX hybridises with the nucleic acid and inhibits the expression of Kox 1.
XX The antisense oligonucleotide is a chimeric oligonucleotide. The
XX antisense oligonucleotide comprises at least one modified internucleoside
XX linkage, preferably a phosphorothioate linkage. It also comprises at
XX least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX sugar moiety. The antisense oligonucleotide further comprises at least
XX one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX hyperproliferative disorders, e.g. cancer, viral or bacterial infections,
XX and diseases involving hyperactivation of an immune response. The present
XX sequence represents an antisense oligonucleotide used in the examples of
XX the present invention.
XX
XX Sequence 20 BP; 7 A; 1 C; 9 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 1..4%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 29;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 757 CTTTCTCCATCGAACCTTC 776
Db 20 CTTTCTCCATCGAACCTTC 1
RESULT 5
AD136731/C
ID AD136731 standard; DNA; 20 BP.
XX
XX AD136731;
XX
XX AC
XX
XX 15-APR-2004 (first entry)
XX
XX Human Kox 1 DNA, antisense oligonucleotide #1.
XX
XX Human; Kox 1; zinc finger protein 10; antisense therapy;
XX hyperproliferative disorder; cancer; viral infection;
XX bacterial infection; hyperactivation; immune response; cytostatic;
```

```
KM virucide; antibacterial; immunosuppressive; phosphorothioate; ss.
XX
XX Homo sapiens.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX US2003232438-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KM, Freier SM;
XX
XX WPI; 2004-052172/05.
XX
XX New antisense oligonucleotide targeted to a nucleic acid encoding Kox 1,
XX useful for treating cancer, viral or bacterial infections or a disease
XX involving hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 13; 80pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding human Kox 1 (zinc finger protein 10). The antisense
XX compound comprises an antisense oligonucleotide that specifically
XX hybridises with the nucleic acid and inhibits the expression of Kox 1.
XX The antisense oligonucleotide is a chimeric oligonucleotide. The
XX antisense oligonucleotide comprises at least one modified internucleoside
XX linkage, preferably a phosphorothioate linkage. It also comprises at
XX least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX sugar moiety. The antisense oligonucleotide further comprises at least
XX one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX hyperproliferative disorders, e.g. cancer, viral or bacterial infections,
XX and diseases involving hyperactivation of an immune response. The present
XX sequence represents an antisense oligonucleotide used in the examples of
XX the present invention.
XX
XX Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 1..4%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 29;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1619 GGATAGCAAAATCTCTCCT 1638
Db 20 GGATAGCAAAATCTCTCCT 1
RESULT 6
AD136809
ID AD136809 standard; DNA; 20 BP.
XX
XX AD136809;
XX
XX AC
XX
XX 15-APR-2004 (first entry)
XX
XX Human Kox 1 DNA target sequence #1.
XX
XX Human; Kox 1; zinc finger protein 10; antisense therapy;
XX hyperproliferative disorder; cancer; viral infection;
XX bacterial infection; hyperactivation; immune response; cytostatic;
```

KW	vitruclide; antibacterial; immunosuppressive; ds.
XX	
OS	Homo sapiens.
XX	
PN	US200332438-A1.
XX	
PD	18-DEC-2003.
XX	
XX	17-JUN-2002; 2002US-00173817.
XX	
PR	17-JUN-2002; 2002US-00173817.
XX	
PA	(ISIS-) ISIS PHARM INC.
XX	
PI	Dobie KW, Freiler SM,
XX	
DR	WPI; 2004-052172/05.
XX	
PT	New antisense oligonucleotide targeted to a nucleic acid encoding Kox 1,
XX	
PT	useful for treating cancer, viral or bacterial infections or a disease
XX	
PT	involving hyperactivation of an immune response.
XX	
PS	Example 15; SEQ ID NO 91; 80pp; English.
XX	
CC	The present invention relates to antisense compounds targeted to a
CC	nucleic acid encoding human Kox 1 (zinc finger protein 10). The antisense
CC	compound comprises an antisense oligonucleotide that specifically
CC	hybridizes with the nucleic acid and inhibits the expression of Kox 1.
CC	The antisense oligonucleotide is a chimeric oligonucleotide. The
CC	antisense oligonucleotide comprises at least one modified internucleoside
CC	linkage, preferably a phosphorothioate linkage. It also comprises at
CC	least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
CC	sugar moiety. The antisense oligonucleotide further comprises at least
CC	one modified nucleobase, preferably a 5-methylcytosine. The antisense
CC	oligonucleotides are useful for the treatment of diseases such as
CC	hyperproliferative disorders, e.g. cancer, viral or bacterial infections,
CC	and diseases involving hyperactivation of an immune response. The present
CC	sequence represents a human Kox 1 DNA target sequence for an antisense
XX	oligonucleotide.
XX	
SQ	Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
XX	
Query Match	1.4%; Score 20; DB 1; Length 20;
Best Local Similarity	100.0%; Pred. No. 29;
Matches 20; Conservative	0; Mismatches 0; Indels 0; Gaps 0;
Oy	1619 GGATGACCAAAATCCTCCT 1638
DB	1 GGATGACCAAAATCCTCCT 20
RESULT 7	
AD136813	
ID	AD136813 standard; DNA, 20 BP.
XX	
AC	AD136813;
XX	
DT	15-APR-2004 (first entry)
XX	
XX	Human Kox 1 DNA target sequence #5.
KW	Human; Kox 1; zinc finger protein 10; antisense therapy;
KW	hyperproliferative disorder; cancer; viral infection;
KW	bacterial infection; hyperactivation; immune response; cytostatic;
KW	vitruclide; antibacterial; immunosuppressive; ds.
XX	
OS	Homo sapiens.
XX	
PN	US200332438-A1.
XX	
DD	18-DEC-2003.
XX	
PF	17-JUN-2002; 2002US-00173817.

XX	PR	17-JUN-2002; 2002US-00173817.
.XX	PA	(ISIS-) ISIS PHARM INC.
XX	PI	Doble KM, Freier SM;
XX	KW	WP1; 2004-052172/05.
DR	PT	New antisense oligonucleotide targeted to a nucleic acid encoding Kox 1,
XX	PT	useful for treating cancer, viral or bacterial infections or a disease
PT	involving hyperactivation of an immune response.	
XX	Example 15; SEQ ID NO 95; 80bp; English.	
PS	The present invention relates to antisense compounds targeted to a	
CC	nucleic acid encoding human Kox 1 (zinc finger protein 10). The antisense	
CC	compound comprises an antisense oligonucleotide that specifically	
CC	hybridizes with the nucleic acid and inhibits the expression of Kox 1.	
CC	The antisense oligonucleotide is a chimeric oligonucleotide. The	
CC	antisense oligonucleotide comprises at least one modified internucleoside	
CC	linkage, preferably a phosphorothioate linkage. It also comprises at	
CC	least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)	
CC	sugar moiety. The antisense oligonucleotide further comprises at least	
CC	one modified nucleobase, preferably a 5-methylcytosine. The antisense	
CC	oligonucleotides are useful for the treatment of diseases such as	
CC	hyperproliferative disorders, e.g. cancer, viral or bacterial infections,	
CC	and diseases involving hyperactivation of an immune response. The present	
CC	sequence represents a human Kox 1 DNA target sequence for an antisense	
CC	oligonucleotide.	
SQ	Sequence 20 BP; 1 A; 4 C; 6 G; 9 T; 0 U; 0 Other;	
XX		
Query Match	1.4%; Score 20; DB 1; Length 20;	
Best Local Similarity	100.0%; Pred. No. 29;	
Matches	20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
Oy	706 TGGAGTCGCGTTCTGTGTTT 725       1 TGGAGTCGCGTTCTGTGTTT 20	
DB		
RESULT 8		
ADJ36743/c		
ID	ADJ36743 standard; DNA; 20 BP.	
AC	ADJ36743;	
XX		
DT	15-APR-2004 (first entry)	
XX		
DE	Human KOX 1 DNA, antisense oligonucleotide #13.	
XX		
KW	Human; Kox 1; zinc finger protein 10; antisense therapy;	
KW	hyperproliferative disorder; cancer; viral infection;	
KW	bacterial infection; hyperactivation; immune response; cytostatic;	
KW	virucide; antibacterial; immunosuppressive; phosphorothioate; ss.	
OS	Homo sapiens.	
XX		
FH	Key	
FT	modified_base	
FT	Location/Qualifiers	
FT	1..20	
FT	/*tag= a	
FT	/mod_base= OTHER	
FT	/note= "This oligonucleotide has a phosphorothioate	
FT	backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'	
FT	and 3' ends, which are 5 nucleotides in length at each	
FT	end. All cytidine residues are 5-methylcytidines"	
XX		
PN	US2003232438-A1.	
XX		
DD	18-DEC-2003.	
XX		
Pf	17-JUN-2002; 2002US-00173817.	

```
XX 17-JUN-2002; 2002US-00173817.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Dobie KM, Freier SM;
PI
XX WPI; 2004-052172/05.
DR
XX New antisense oligonucleotide targeted to a nucleic acid encoding Kox 1,
PT useful for treating cancer, viral or bacterial infections or a disease
PT involving hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 25; 80bp; English.
XX
CC The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding human Kox 1 (zinc finger protein 10). The antisense
CC compound comprises an antisense oligonucleotide that specifically
CC hybridizes with the nucleic acid and inhibits the expression of Kox 1.
CC The antisense oligonucleotide is a chimeric oligonucleotide. The
CC antisense oligonucleotide comprises at least one modified internucleoside
CC linkage, preferably a phosphorothioate linkage. It also comprises at
CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
CC sugar moiety. The antisense oligonucleotide further comprises at least
CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of diseases such as
CC hyperproliferative disorders, e.g. cancer, viral or bacterial infections,
CC and diseases involving hyperactivation of an immune response. The present
CC sequence represents an antisense oligonucleotide used in the examples of
CC the present invention.
XX
XX Sequence 20 BP; 9 A; 6 C; 4 G; 1 T; 0 U; 0 Other;
SQ
Query Match 1.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 706 TGGAGTCGCGTTCTCTGTTT 725
DB 20 TGGAGTCGCGTTCTCTGTTT 1
RESULT 9
AD136742/c
ID AD136742 standard; DNA; 20 BP.
XX
XX AD136742;
AC
XX 15-APR-2004 (first entry)
DT
XX Human Kox 1 DNA, antisense oligonucleotide #12.
DE
XX Human; Kox 1; zinc finger protein 10; antisense therapy;
KM hyperproliferative disorder; cancer; viral infection;
KM bacterial infection; hyperactivation; immune response; cytostatic;
KM virucide; antibacterial; immunosuppressive; phosphorothioate; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH 1.20
FT modified_base
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX US2003232438-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00173817.
PF
```

```
XX 17-JUN-2002; 2002US-00173817.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Dobie KM, Freier SM;
PI
XX WPI; 2004-052172/05.
DR
XX New antisense oligonucleotide targeted to a nucleic acid encoding Kox 1,
PT useful for treating cancer, viral or bacterial infections or a disease
PT involving hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 24; 80bp; English.
XX
CC The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding human Kox 1 (zinc finger protein 10). The antisense
CC compound comprises an antisense oligonucleotide that specifically
CC hybridizes with the nucleic acid and inhibits the expression of Kox 1.
CC The antisense oligonucleotide is a chimeric oligonucleotide. The
CC antisense oligonucleotide comprises at least one modified internucleoside
CC linkage, preferably a phosphorothioate linkage. It also comprises at
CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
CC sugar moiety. The antisense oligonucleotide further comprises at least
CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of diseases such as
CC hyperproliferative disorders, e.g. cancer, viral or bacterial infections,
CC and diseases involving hyperactivation of an immune response. The present
CC sequence represents an antisense oligonucleotide used in the examples of
CC the present invention.
XX
XX Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 700 GGTGATGAGTCCGTTCT 719
DB 20 GGTGATGAGTCCGTTCT 1
RESULT 10
AD136764/c
ID AD136764 standard; DNA; 20 BP.
XX
XX AD136764;
AC
XX 15-APR-2004 (first entry)
DT
XX Human Kox 1 DNA, antisense oligonucleotide #34.
DE
XX Human; Kox 1; zinc finger protein 10; antisense therapy;
KM hyperproliferative disorder; cancer; viral infection;
KM bacterial infection; hyperactivation; immune response; cytostatic;
KM virucide; antibacterial; immunosuppressive; phosphorothioate; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH 1.20
FT modified_base
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX US2003232438-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00173817.
PF
```



```
XX 17-JUN-2002; 2002US-00173817.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Dobie KW, Freier SM;
PI
XX WPI; 2004-052172/05.
DR
XX
XX New antisense oligonucleotide targeted to a nucleic acid encoding Kox 1,
PT useful for treating cancer, viral or bacterial infections or a disease
XX involving hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 46; 80bp; English.
XX
XX The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding human Kox 1 (zinc finger protein 10). The antisense
CC compound comprises an antisense oligonucleotide that specifically
CC hybridizes with the nucleic acid and inhibits the expression of Kox 1.
CC The antisense oligonucleotide is a chimeric oligonucleotide. The
CC antisense oligonucleotide comprises at least one modified internucleoside
CC linkage, preferably a phosphorothioate linkage. It also comprises at
CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
CC sugar moiety. The antisense oligonucleotide further comprises at least
CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of diseases such as
CC hyperproliferative disorders, e.g. cancer, viral or bacterial infections,
CC and diseases involving hyperactivation of an immune response. The present
CC sequence represents an antisense oligonucleotide used in the examples of
CC the present invention.
XX
XX Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 1.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1023 GAGATTGACGCGAGTGGGC 1042
Db 20 GAGATTGACGCGAGTGGGC 1
RESULT 11
ADM93204/C
ID ADM93204 standard; DNA; 20 BP.
XX
XX ADM93204;
AC
XX
XX 29-JUL-2004 (first entry)
DT
XX
XX Human Kox-1 antisense oligonucleotide ISIS206100.
DE
XX
XX Human; ss; antisense; Kox-1; zinc finger protein 10;
KW chromosome 12q13-qter; hyperproliferative disorder; cancer;
KW bacterial infection; viral infection; immune response.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH 1.20
FT /tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages and all cytidines are 5
FT -methylcytidines"
FT 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
FT 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
XX
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PN US2004087536-A1.
XX
XX 06-MAY-2004.
PD
XX
XX 19-AUG-2003; 2003US-00643432.
XX
XX 17-JUN-2002; 2002US-00173817.
PR
XX
XX (DOBI/) DOBIE K W.
PA (FREI/) FREIER S M.
XX
XX Dobie KW, Freier SM;
PI
XX WPI; 2004-364533/34.
DR
XX
XX New antisense oligonucleotides that inhibit the expression of the zinc
PT finger transcriptional repressor Kox 1, useful for treating conditions
PT such as cancer, and hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 46; 80bp; English.
XX
XX The invention relates to a compound 8-80 nucleobases in length targeted
CC to, and which specifically hybridizes with a nucleic acid molecule
CC encoding Kox 1 (also known as zinc finger protein 10, whose gene is
CC located on chromosome 12q13-qter), and inhibits the expression of Kox 1,
CC i.e. an antisense oligonucleotide. Also included are inhibiting the
CC expression of Kox 1 in cells or tissues by contacting the cells or
CC tissues with the compound, treating an animal having a disease or
CC condition associated with by Kox 1 administering to the animal a
CC therapeutic or prophylactic amount of the compound and screening an
CC antisense compound by contacting a preferred target region of a nucleic
CC acid molecule encoding Kox 1 with one or more candidate antisense
CC compounds and selecting for one or more candidate antisense compounds
CC that inhibit the expression of a nucleic acid encoding Kox 1. The
CC compound, composition and methods are useful for treating diseases or
CC conditions associated with Kox 1, such as hyperproliferative disorders
CC (e.g. cancer), conditions arising from bacterial or viral infection, or
CC conditions involving hyperactivation of an immune response. They are also
CC useful in research and diagnostics. The present sequence is an antisense
CC oligonucleotide targeting human Kox-1.
XX
XX Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 1.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1023 GAGATTGACGCGAGTGGGC 1042
Db 20 GAGATTGACGCGAGTGGGC 1
RESULT 12
ADM93254
ID ADM93254 standard; cDNA; 20 BP.
XX
XX ADM93254;
AC
XX
XX 29-JUL-2004 (first entry)
DT
XX
XX Human Kox-1 cDNA, antisense target sequence #2.
DE
XX
XX Human; ss; antisense; Kox-1; zinc finger protein 10;
KW chromosome 12q13-qter; hyperproliferative disorder; cancer;
KW bacterial infection; viral infection; immune response.
XX
XX Homo sapiens.
OS
XX
XX US2004087536-A1.
XX
XX 06-MAY-2004.
PD
XX
XX 19-AUG-2003; 2003US-00643432.
XX
```

```
XX 17-JUN-2002; 2002US-00173817.
PR
XX
XX (DOBI/) DOBIE K W.
PA (FREI/) FREIER S M.
XX
XX Dobie KW, Freier SM;
XX
XX WPI; 2004-364533/34.
XX
PT New antisense oligonucleotides that inhibit the expression of the zinc
PT finger transcriptional repressor KOX 1, useful for treating conditions
PT such as cancer, and hyperactivation of an immune response.
XX
XX
XX Example 15; SEQ ID NO 96; 80pp; English.
XX
CC The invention relates to a compound 8-80 nucleobases in length targeted
CC to, and which specifically hybridises with a nucleic acid molecule
CC encoding KOX 1 (also known as zinc finger protein 10, whose gene is
CC located on chromosome 12q13-qter), and inhibits the expression of KOX 1,
CC i.e. an antisense oligonucleotide. Also included are inhibiting the
CC expression of KOX 1 in cells or tissues by contacting the cells or
CC tissues with the compound, treating an animal having a disease or
CC condition associated with by KOX 1 administering to the animal a
CC therapeutic or prophylactic amount of the compound and screening an
CC antisense compound by contacting a preferred target region of a nucleic
CC acid molecule encoding KOX 1 with one or more candidate antisense
CC compounds and selecting for one or more candidate antisense compounds
CC that inhibit the expression of a nucleic acid encoding KOX 1. The
CC compound, composition and methods are useful for treating diseases or
CC conditions associated with KOX 1, such as hyperproliferative disorders
CC (e.g. cancer), conditions arising from bacterial or viral infection, or
CC conditions involving hyperactivation of an immune response. They are also
CC useful in research and diagnostics. The present sequence is a target
CC region from the human KOX-1 cDNA.
XX
XX Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
SQ
Query Match 1.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 767 TCGAACCTTCTAGTCTTA 786
DB 1 TCGAACCTTCTAGTCTTA 20
RESULT 13
ADM93249
ID ADM93249 standard; DNA; 20 BP.
XX
XX ADM93249;
AC
XX 29-JUL-2004 (first entry)
XX
XX Human KOX-1 gene, antisense target sequence #1.
DE
XX Human; ds; antisense; KOX-1; zinc finger protein 10;
KW Chromosome 12q13-qter; hyperproliferative disorder; cancer;
KW bacterial infection; viral infection; immune response.
XX
XX Homo sapiens.
OS
XX US2004087536-A1.
XX
XX 06-MAY-2004.
XX
XX 19-AUG-2003; 2003US-00643432.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX (DOBI/) DOBIE K W.
PA (FREI/) FREIER S M.
XX
```

```
XX Dobie KW, Freier SM;
PI
XX
XX WPI; 2004-364533/34.
XX
XX
XX New antisense oligonucleotides that inhibit the expression of the zinc
XX finger transcriptional repressor KOX 1, useful for treating conditions
XX such as cancer, and hyperactivation of an immune response.
XX
XX
XX Example 15; SEQ ID NO 91; 80pp; English.
XX
XX
CC The invention relates to a compound 8-80 nucleobases in length targeted
CC to, and which specifically hybridises with a nucleic acid molecule
CC encoding KOX 1 (also known as zinc finger protein 10, whose gene is
CC located on chromosome 12q13-qter), and inhibits the expression of KOX 1,
CC i.e. an antisense oligonucleotide. Also included are inhibiting the
CC expression of KOX 1 in cells or tissues by contacting the cells or
CC tissues with the compound, treating an animal having a disease or
CC condition associated with by KOX 1 administering to the animal a
CC therapeutic or prophylactic amount of the compound and screening an
CC antisense compound by contacting a preferred target region of a nucleic
CC acid molecule encoding KOX 1 with one or more candidate antisense
CC compounds and selecting for one or more candidate antisense compounds
CC that inhibit the expression of a nucleic acid encoding KOX 1. The
CC compound, composition and methods are useful for treating diseases or
CC conditions associated with KOX 1, such as hyperproliferative disorders
CC (e.g. cancer), conditions arising from bacterial or viral infection, or
CC conditions involving hyperactivation of an immune response. They are also
CC useful in research and diagnostics. The present sequence is a target
CC region from the human KOX-1 genomic DNA.
XX
XX Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 1.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1619 GGATGCAAAATCTCTCCT 1638
DB 1 GGATGCACAAAATCTCTCCT 20
RESULT 14
ADM93253
ID ADM93253 standard; cDNA; 20 BP.
XX
XX ADM93253;
AC
XX 29-JUL-2004 (first entry)
XX
XX Human KOX-1 cDNA, antisense target sequence #1.
DE
XX Human; ss; antisense; KOX-1; zinc finger protein 10;
KW Chromosome 12q13-qter; hyperproliferative disorder; cancer;
KW bacterial infection; viral infection; immune response.
XX
XX Homo sapiens.
OS
XX US2004087536-A1.
XX
XX 06-MAY-2004.
XX
XX 19-AUG-2003; 2003US-00643432.
XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX (DOBI/) DOBIE K W.
PA (FREI/) FREIER S M.
XX
XX Dobie KW, Freier SM;
PI
XX
XX WPI; 2004-364533/34.
XX
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```
PT New antisense oligonucleotides that inhibit the expression of the zinc
PT finger transcriptional repressor KOX 1, useful for treating conditions
PT such as cancer, and hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 95; 80pp; English.
XX
CC The invention relates to a compound 8-80 nucleobases in length targeted
CC to, and which specifically hybridises with a nucleic acid molecule
CC encoding KOX 1 (also known as zinc finger protein 10, whose gene is
CC located on chromosome 12q13-qter), and inhibits the expression of KOX 1,
CC i.e. an antisense oligonucleotide. Also included are inhibiting the
CC expression of KOX 1 in cells or tissues by contacting the cells or
CC tissues with the compound, treating an animal having a disease or
CC condition associated with by KOX 1 administering to the animal a
CC therapeutic or prophylactic amount of the compound and screening an
CC antisense compound by contacting a preferred target region of a nucleic
CC acid molecule encoding KOX 1 with one or more candidate antisense
CC compounds and selecting for one or more candidate antisense compounds
CC that inhibit the expression of a nucleic acid encoding KOX 1. The
CC compound, composition and methods are useful for treating diseases or
CC conditions associated with KOX 1, such as hyperproliferative disorders
CC (e.g. cancer), conditions arising from bacterial or viral infection, or
CC conditions involving hyperactivation of an immune response. They are also
CC useful in research and diagnostics. The present sequence is a target
CC region from the human KOX-1 cDNA.
XX
SQ Sequence 20 BP; 1 A; 4 C; 6 G; 9 T; 0 U; 0 Other;
XX
Query Match 1.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 706 TGGAGTCCGCTTCTCTGTT 725
DB 1 TGGAGTCCGCTTCTCTGTT 20
XX
RESULT 15
ADM93185/C
ID ADM93185 standard; DNA; 20 BP.
XX
XX ADM93185;
XX
XX 29-JUL-2004 (first entry)
XX
DE Human KOX-1 antisense oligonucleotide ISIS206081.
XX
XX Human; ss; antisense; KOX-1; zinc finger protein 10;
XX chromosome 12q13-qter; hyperproliferative disorder; cancer;
XX bacterial infection; viral infection; immune response.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "Phosphorothioate linkages and all cytidines are 5
XX -methylcytidines"
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl residues"
XX
XX US2004087536-A1.
XX
XX 06-MAY-2004.
XX
XX 19-AUG-2003; 2003US-00643432.
XX
XX
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XX
XX 17-JUN-2002; 2002US-00173817.
XX
XX (DOB1/) DOBIE K W.
XX (FRI1/) FRIER S M.
XX
XX Dobie KW, Freier SW;
XX
XX WPI; 2004-364533/34.
XX
XX New antisense oligonucleotides that inhibit the expression of the zinc
XX finger transcriptional repressor KOX 1, useful for treating conditions
XX such as cancer, and hyperactivation of an immune response.
XX
XX Example 15; SEQ ID NO 27; 80pp; English.
XX
XX The invention relates to a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding KOX 1 (also known as zinc finger protein 10, whose gene is
XX located on chromosome 12q13-qter), and inhibits the expression of KOX 1,
XX i.e. an antisense oligonucleotide. Also included are inhibiting the
XX expression of KOX 1 in cells or tissues by contacting the cells or
XX tissues with the compound, treating an animal having a disease or
XX condition associated with by KOX 1 administering to the animal a
XX therapeutic or prophylactic amount of the compound and screening an
XX antisense compound by contacting a preferred target region of a nucleic
XX acid molecule encoding KOX 1 with one or more candidate antisense
XX compounds and selecting for one or more candidate antisense compounds
XX that inhibit the expression of a nucleic acid encoding KOX 1. The
XX compound, composition and methods are useful for treating diseases or
XX conditions associated with KOX 1, such as hyperproliferative disorders
XX (e.g. cancer), conditions arising from bacterial or viral infection, or
XX conditions involving hyperactivation of an immune response. They are also
XX useful in research and diagnostics. The present sequence is an antisense
XX oligonucleotide targeting human KOX-1.
XX
SQ Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
XX
Query Match 1.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 767 TCGAACCTTCTAGTTCCTTA 786
DB 20 TCGAACCTTCTAGTTCCTTA 1
XX
RESULT 16
ADM93183/C
ID ADM93183 standard; DNA; 20 BP.
XX
XX ADM93183;
XX
XX 29-JUL-2004 (first entry)
XX
DE Human KOX-1 antisense oligonucleotide ISIS206079.
XX
XX Human; ss; antisense; KOX-1; zinc finger protein 10;
XX chromosome 12q13-qter; hyperproliferative disorder; cancer;
XX bacterial infection; viral infection; immune response.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "Phosphorothioate linkages and all cytidines are 5
XX -methylcytidines"
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl residues"
XX
XX
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FT modified_base 16.20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
XX
FN US2004087536-A1.
XX
PD 06-MAY-2004.
XX
PF 19-AUG-2003; 2003US-00643432.
XX
PR 17-JUN-2002; 2002US-00173817.
XX
PA (DOBIE/) DOBIE K W.
PA (FREIER/) FREIER S M.
XX
PI Dobie KM, Freier SM;
XX
DR WPI; 2004-364533/34.
XX
PT New antisense oligonucleotides that inhibit the expression of the zinc
PT finger transcriptional repressor Kox 1, useful for treating conditions
PT such as cancer, and hyperactivation of an immune response.
XX
PS Example 15; SEQ ID NO 25; 80pp; English.
XX
CC The invention relates to a compound 8-80 nucleobases in length targeted
CC to, and which specifically hybridizes with a nucleic acid molecule
CC encoding Kox 1 (also known as zinc finger protein 10, whose gene is
CC located on chromosome 12q13-qter), and inhibits the expression of Kox 1,
CC i.e. an antisense oligonucleotide. Also included are inhibiting the
CC expression of Kox 1 in cells or tissues by contacting the cells or
CC tissues with the compound, treating an animal having a disease or
CC condition associated with by Kox 1 administering to the animal a
CC therapeutic or prophylactic amount of the compound and screening an
CC antisense compound by contacting a preferred target region of a nucleic
CC acid molecule encoding Kox 1 with one or more candidate antisense
CC compounds and selecting for one or more candidate antisense compounds
CC that inhibit the expression of a nucleic acid encoding Kox 1. The
CC compound, composition and methods are useful for treating diseases or
CC conditions associated with Kox 1, such as hyperproliferative disorders
CC (e.g. cancer), conditions arising from bacterial or viral infection, or
CC conditions involving hyperactivation of an immune response. They are also
CC useful in research and diagnostics. The present sequence is an antisense
CC oligonucleotide targeting human Kox-1.
XX
SQ Sequence 20 BP; 9 A; 6 C; 4 G; 1 T; 0 U; 0 Other;
XX
Query Match 1.4%; Score 20; DB 1; Length 20;
Query Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 706 TGGAGTCGCGTCTCTGTTT 725
DB 20 TGGAGTCGCGTCTCTGTTT 1
XX
RESULT 17
ADM93171/C
ID ADM93171 standard; DNA; 20 BP.
XX
AC ADM93171;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human Kox-1 antisense oligonucleotide ISIS206067.
XX
KW Human; ss; antisense; Kox-1; zinc finger protein 10;
KW chromosome 12q13-qter; hyperproliferative disorder; cancer;
KW bacterial infection; viral infection; immune response.
XX
OS Homo sapiens.
XX
```

```
EH Key Location/Qualifiers
FT modified_base 1.20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages and all cytidines are 5
FT -methylcytidines"
FT modified_base 1.5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
FT modified_base 16.20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
XX
FN US2004087536-A1.
XX
PD 06-MAY-2004.
XX
PF 19-AUG-2003; 2003US-00643432.
XX
PR 17-JUN-2002; 2002US-00173817.
XX
PA (DOBIE/) DOBIE K W.
PA (FREIER/) FREIER S M.
XX
PI Dobie KM, Freier SM;
XX
DR WPI; 2004-364533/34.
XX
PT New antisense oligonucleotides that inhibit the expression of the zinc
PT finger transcriptional repressor Kox 1, useful for treating conditions
PT such as cancer, and hyperactivation of an immune response.
XX
PS Example 15; SEQ ID NO 13; 80pp; English.
XX
CC The invention relates to a compound 8-80 nucleobases in length targeted
CC to, and which specifically hybridizes with a nucleic acid molecule
CC encoding Kox 1 (also known as zinc finger protein 10, whose gene is
CC located on chromosome 12q13-qter), and inhibits the expression of Kox 1,
CC i.e. an antisense oligonucleotide. Also included are inhibiting the
CC expression of Kox 1 in cells or tissues by contacting the cells or
CC tissues with the compound, treating an animal having a disease or
CC condition associated with by Kox 1 administering to the animal a
CC therapeutic or prophylactic amount of the compound and screening an
CC antisense compound by contacting a preferred target region of a nucleic
CC acid molecule encoding Kox 1 with one or more candidate antisense
CC compounds and selecting for one or more candidate antisense compounds
CC that inhibit the expression of a nucleic acid encoding Kox 1. The
CC compound, composition and methods are useful for treating diseases or
CC conditions associated with Kox 1, such as hyperproliferative disorders
CC (e.g. cancer), conditions arising from bacterial or viral infection, or
CC conditions involving hyperactivation of an immune response. They are also
CC useful in research and diagnostics. The present sequence is an antisense
CC oligonucleotide targeting human Kox-1.
XX
SQ Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
XX
Query Match 1.4%; Score 20; DB 1; Length 20;
Query Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1619 GGATAGCAAAATCTCCTT 1638
DB 20 GGATAGCAAAATCTCCTT 1
XX
RESULT 18
ADM93182/C
ID ADM93182 standard; DNA; 20 BP.
XX
AC ADM93182;
XX
```

DT	29-JUN-2004	(first entry)
DE	Human KOX-1 antisense oligonucleotide ISIS206078.	
XX		
XX	Human; ss; antisense; KOX-1; zinc finger protein 10;	
KW	chromosome 12q13-qter; hyperproliferative disorder; cancer;	
KW	bacterial infection; viral infection; immune response.	
OS	Homo sapiens.	
XX		
XX		
FH	Key	Location/Qualifiers
FT	modified_base	1..20
FT		/tag= b
FT		/mod_base= OTHER
FT		/note= "Phosphorothioate linkages and all cytidines are 5
FT		-methylcytidines"
FT	modified_base	1..5
FT		/tag= a
FT		/mod_base= OTHER
FT		/note= "2'-methoxyethyl residues"
FT	modified_base	16..20
FT		/tag= c
FT		/mod_base= OTHER
FT		/note= "2'-methoxyethyl residues"
XX		
PN	US2004087536-A1.	
XX		
PD	06-MAY-2004.	
XX		
PE	19-AUG-2003; 2003US-00643432.	
XX		
PR	17-JUN-2002; 2002US-00173817.	
XX		
PA	(DOBII/) DOBIE K W.	
PA	(FREII/) FREIER S M.	
XX		
P1	Dobie KW, Freier SM;	
DR	WPI; 2004-364533/34.	
XX		
PT	New antisense oligonucleotides that inhibit the expression of the zinc	
PT	finger transcriptional repressor KOX 1, useful for treating conditions	
PT	such as cancer, and hyperactivation of an immune response.	
XX		
PS	Example 15; SEQ ID NO 24; 80bp; English.	
XX		
CC	The invention relates to a compound 8-80 nucleobases in length targeted	
CC	to, and which specifically hybridizes with a nucleic acid molecule	
CC	encoding KOX 1 (also known as zinc finger protein 10, whose gene is	
CC	located on chromosome 12q13-qter), and inhibits the expression of KOX 1,	
CC	i.e. an antisense oligonucleotide. Also included are inhibiting the	
CC	expression of KOX 1 in cells or tissues by contacting the cells or	
CC	tissues with the compound, treating an animal having a disease or	
CC	condition associated with by KOX 1 administering to the animal a	
CC	therapeutic or prophylactic amount of the compound and screening an	
CC	antisense compound by contacting a preferred target region of a nucleic	
CC	acid molecule encoding KOX 1 with one or more candidate antisense	
CC	compounds and selecting for one or more candidate antisense compounds	
CC	that inhibit the expression of a nucleic acid encoding KOX 1. The	
CC	compound, composition and methods are useful for treating diseases or	
CC	conditions associated with KOX 1, such as hyperproliferative disorders	
CC	(e.g. cancer), conditions arising from bacterial or viral infection, or	
CC	conditions involving hyperactivation of an immune response. They are also	
CC	useful in research and diagnostics. The present sequence is an antisense	
CC	oligonucleotide targeting human KOX-1.	
XX		
SO	Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;	
XX		
Query Match	1.4%; Score 20; DB 1; Length 20;	
Best Local Similarity	100.0%; Pred. No. 29;	
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;		
700 GGTGATGAGTGGCTTCT 719		

DB	20	GGTGAATGAGTCCGCTTCT	1
RESULT 19			
ADM93184/C			
ID	ADM93184	standard; DNA; 20 BP.	
XX	AC		
XX	ADM93184;		
XX	DT		
XX	29-JUL-2004	(first entry)	
DE	Human KOX-1 antisense oligonucleotide	ISIS206080.	
XX	Human; ss; antisense; KOX-1; zinc finger protein 10;		
KW	chromosome 12q13-qter; hyperproliferative disorder; cancer;		
XX	bacterial infection; viral infection; immune response.		
OS	Homo sapiens.		
XX	Key	Location/Qualifiers	
FT	modified_base	1..20	
FT		/*tag= b	
FT		/mod_base= OTHER	
FT		/note= "Phosphorochiocate linkages and all cytidines are 5	
FT	modified_base	1..5	
FT		-methylcytidines"	
FT		/*tag= a	
FT		/mod_base= OTHER	
FT	modified_base	/note= "2'-methoxyethyl residues"	
FT		16..20	
FT		/*tag= C	
FT		/mod_base= OTHER	
XX		/note= "2'-methoxyethyl residues"	
XX	US2004087536-A1.		
XX	06-MAY-2004.		
XX	19-AUG-2003; 2003US-00643432.		
XX	17-JUN-2002; 2002US-00173817.		
XX	(DOB1/) DOBIE K W.		
XX	(FREI/) FREIER S M.		
XX	Dobie KW, Freier SM;		
XX	WI; 2004-364533/34.		
XX	Example 15; SEQ ID NO 26; 80pp; English.		
XX	The invention relates to a compound 8-80 nucleobases in length targeted		
XX	to, and which specifically hybridizes with a nucleic acid molecule		
XX	encoding KOX 1 (also known as zinc finger protein 10, whose gene is		
XX	located on chromosome 12q13-qter), and inhibits the expression of KOX 1,		
XX	i.e., an antisense oligonucleotide. Also included are inhibiting the		
XX	expression of KOX 1 in cells or tissues by contacting the cells or		
XX	tissues with the compound, treating an animal having a disease or		
XX	condition associated with by KOX 1 administering to the animal a		
XX	therapeutic or prophylactic amount of the compound and screening an		
XX	antisense compound by contacting a preferred target region of a nucleic		
XX	acid molecule encoding KOX 1 with one or more candidate antisense		
XX	compounds and selecting for one or more candidate antisense compounds		
XX	that inhibit the expression of a nucleic acid encoding KOX 1. The		
XX	compound, composition and methods are useful for treating diseases or		
XX	conditions associated with KOX 1, such as hyperproliferative disorders		
XX	(e.g. cancer), conditions arising from bacterial or viral infection, or		
XX	conditions involving hyperactivation of an immune response. They are also		

CC useful in research and diagnostics. The present sequence is an antisense  
CC oligonucleotide targeting human KOX-1.

XX Sequence 20 BP; 7 A; 1 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 1.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 29;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 757 CTTTCTCCCATCGAACCTTC 776  
|||  
Db 20 CTTTCTCCCATCGAACCTTC 1

RESULT 20  
ADM93268  
ID ADM93268 standard; cDNA; 20 BP.

XX ADM93268;

XX 29-JUL-2004 (first entry)

XX Human KOX-1 cDNA, antisense target sequence #16.

XX Human; ss; antisense; KOX-1; zinc finger protein 10;

KW chromosome 12q13-qter; hyperproliferative disorder; cancer;

KW bacterial infection; viral infection; immune response.

XX Homo sapiens.

XX US2004087536-A1.

XX 06-MAY-2004.

XX 19-AUG-2003; 2003US-00643432.

XX 17-JUN-2002; 2002US-00173817.

XX (DOBIE/) DOBIE K W.

XX (FREIER/) FREIER S M.

XX Dobie KW, Freier SM;

XX WPI; 2004-364533/34.

XX Example 15; SEQ ID NO 110; 80pp; English.

PT New antisense oligonucleotides that inhibit the expression of the zinc  
PT finger transcriptional repressor KOX 1, useful for treating conditions  
PT such as cancer, and hyperactivation of an immune response.

CC The invention relates to a compound 8-80 nucleobases in length targeted  
CC to, and which specifically hybridizes with a nucleic acid molecule  
CC encoding KOX 1 (also known as zinc finger protein 10, whose gene is  
CC located on chromosome 12q13-qter), and inhibits the expression of KOX 1,  
CC i.e. an antisense oligonucleotide. Also included are inhibiting the  
CC expression of KOX 1 in cells or tissues by contacting the cells or  
CC tissues with the compound, treating an animal having a disease or  
CC condition associated with by KOX 1 administering to the animal a  
CC therapeutic or prophylactic amount of the compound and screening an  
CC antisense compound by contacting a preferred target region of a nucleic  
CC acid molecule encoding KOX 1 with one or more candidate antisense  
CC compounds and selecting for one or more candidate antisense compounds  
CC that inhibit the expression of a nucleic acid encoding KOX 1. The  
CC compound, composition and methods are useful for treating diseases or  
CC conditions associated with KOX 1, such as hyperproliferative disorders  
CC (e.g. cancer), conditions arising from bacterial or viral infection, or  
CC conditions involving hyperactivation of an immune response. They are also  
CC useful in research and diagnostics. The present sequence is a target  
CC region from the human KOX-1 cDNA.

XX Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 1.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 29;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1023 GAGATTGACGACAGTGGC 1042  
|||  
Db 1 GAGATTGACGACAGTGGC 20

RESULT 21  
AAC95919  
ID AAC95919 standard; DNA; 25 BP.

XX AAC95919;

XX 26-FEB-2001 (first entry)

XX HLA HLA-B gene PCR primer #30.

XX DNA sequence analysis; sequencing; protein sequence; protein structure;

KW gene typing; organ donation; bacteria identification; 16s rRNA; HLA;

KW human leukocyte antigen; PCR primer; ss.

XX Homo sapiens.

XX WO200065088-A2.

XX 20-APR-2000; 2000WO-EP003636.

XX 26-APR-1999; 99EP-00303215.

XX (AMSH ) AMERSHAM PHARMACIA BIOTECH AB.

XX Ulfendahl P, Wong K;

XX WPI; 2000-679677/66.

PT Identifying extendible primers for use in identification, or  
PT classification of a nucleic acid of an organism, allele or gene such as

PT class 1/2 HLA comprises identifying all possible nucleotide sequences of  
PT specific length.

XX Claim 14; Page 42; 66pp; English.

CC The present invention provides a method for identifying a set of  
CC extendible primers which can be used in the identification, typing and  
CC classification of genes. This can then be used to predict protein  
CC sequence and structure, in organ donation to match the organ with the  
CC receiver, and to identify bacteria in a sample. The method can be used to  
CC type the human leukocyte antigen genes (HLA) and 16s rRNA genes in  
CC particular

XX Sequence 25 BP; 5 A; 3 C; 2 G; 15 T; 0 U; 0 Other;

Query Match 1.3%; Score 18.6; DB 1; Length 25;  
Best Local Similarity 84.0%; Pred. No. 50;  
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1308 TTTTATTTTCAGACAGATCAT 1332  
|||  
Db 1 TTTTATTTTCAGACAGATCAT 25

RESULT 22  
AAH48658/c  
ID AAH48658 standard; DNA; 24 BP.

XX AAH48658;

XX 21-SEP-2001 (first entry)

```

DE Aspartate/ornithine transcarbamylase 13 associated PCR primer 1.
XX
XX Aspartate/ornithine transcarbamylase 13; cytosolic; anti-HIV;
KW antinflammatory; immunostimulatory; malignant tumor; haemopathy;
KW HIV infection; immunological disease; inflammation; PCR primer; ss.
XX
XX Unidentified.
OS
XX W0200148013-A1.
XX
XX 05-JUL-2001.
XX
XX 25-DEC-2000; 2000MO-CN000724.
XX
XX 27-DEC-1999; 99CN-00125786.
XX
XX (SHAN-) SHANGHAI BIONDOW GENE DEV INC.
XX
XX Mao Y, Xie Y;
XX
XX WPI; 2001-425649/45.
XX
XX Aspartate and ornithine transcarbamylase 13 and encoded polynucleotide,
XX applicable in diagnosis and treatment of malignant tumor, hemopathy, HIV
XX infection, immunological diseases and various inflammation.
XX
XX Example 3; Page 31; 37pp; Chinese.
XX
XX This invention describes a novel aspartate/ornithine transcarbamylase 13
XX which has cytostatic, anti-HIV, antinflammatory and immunostimulatory
XX activity. (I) and encoded polynucleotide are applicable in diagnosis and
XX treatment of malignant tumor, haemopathy, HIV infection, immunological
XX diseases and various inflammation. This sequence represents a PCR primer
XX used in the amplification of the aspartate/ornithine transcarbamylase 13
XX described in the method of the invention
XX
XX Sequence 24 BP; 16 A; 4 C; 1 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 1.3%; Score 18.2; DB 1; Length 24;
XX Best Local Similarity 87.0%; Pred. No. 64;
XX Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1294 GTGGTTAATCTATTTTATTTATTT 1316
XX | | | | | | | | | | | | | | | |
XX 24 GTGGTTAATTTATTTTGTGTTT 2
XX
XX RESULT 23
XX AA092542/C
XX ID AA092542 standard; DNA; 25 BP.
XX
XX AA092542;
XX
XX 06-MAR-1996 (first entry)
XX
XX Primer 12h3-b amplifies Fab MT4 from pMT4-3.
XX
XX Human; Fab; variable chain; heavy; light; region; VH; VL; HIV; gp120;
XX 3b1; 3b3; 3b4; 3b5; MT4; humanised; monoclonal antibody; Mab;
XX immunoreaction; neutralisation; passive immunotherapy; PCR; amplify;
XX polymerase chain reaction; PCR; ss.
XX
XX Synthetic.
XX
XX W09511317-A1.
XX
XX 27-APR-1995.
XX
XX 19-OCT-1994; 94MO-US011907.
XX
XX 19-OCT-1993; 93US-00139409.
XX
XX 26-APR-1994; 94US-00233619.
XX
XX 19-SEP-1994; 94US-00308841.

```

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XX
XX (SCRI ) SCRIPPS RES INSR.
XX
XX Barbas CF, Burton DR, Lerner RA;
XX
XX WPI; 1995-170235/22.
XX
XX Synthetic human neutralising monoclonal antibodies to human
XX immunodeficiency virus - used for diagnosis and immuno-therapy of HIV-
XX induced disease.
XX
XX Example B1; Page 84; 249pp; English.
XX
XX The sequences given in AA092541-42 are primers which bind to and amplify
XX a portion of the plasmid, pMT4-3. This plasmid contains a sequence which
XX encodes human Fab MT4, which comprises a variable chain heavy region
XX (VH), which binds to HIV gp120. The DNA amplified by these primers may be
XX mutagenised to produce sequences encoding the Fab's 3b1, 3b3, 3b4 and
XX 3b5. These Fab's have the same amino acid composition as MT4 but have
XX randomised amino acids in the entire CDR1 and in four of the 18 amino
XX acid residues in CDR3. The Fab's are used in the production of a human
XX monoclonal antibody (Mab) which is capable of immunoreacting with, and
XX neutralising HIV. The Mab's are capable of reducing HIV infectivity titre
XX in an in vitro virus infectivity assay by 50% at a concentration of <100
XX ng of antibody per ml. They can be used to provide passive immunotherapy
XX to HIV in a human. They neutralise HIV more effectively than antibodies
XX selected from non-randomised combinatorial libraries
XX
XX Sequence 25 BP; 11 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.3%; Score 18.2; DB 1; Length 25;
XX Best Local Similarity 87.0%; Pred. No. 62;
XX Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1089 AAGTTCTCTTCTAGTCTACTTC 1111
XX | | | | | | | | | | | | | | | |
XX 24 AAGTTCTCTTCTGTCAGCTTC 2
XX
XX RESULT 24
XX AAH39959/C
XX ID AAH39959 standard; DNA; 25 BP.
XX
XX AAH39959;
XX
XX 14-AUG-2001 (first entry)
XX
XX SNP specific SNP primer SEQ ID 2755.
XX
XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;
XX SNP; genotyping; agammaglobulinemia; diabetes insipidus; cancer;
XX Leisch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolemia;
XX polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
XX acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
XX inflammation; forensic investigation; paternity analysis; primer; ss.
XX
XX Homo sapiens.
XX
XX W0200129262-A2.
XX
XX 26-APR-2001.
XX
XX 13-OCT-2000; 2000MO-US028436.
XX
XX 15-OCT-1999; 99US-0160096P.
XX
XX (ORCH-) ORCHID BIOSCIENCES INC.
XX
XX Picoult-Newburg L, Pohl M;
XX
XX WPI; 2001-290930/30.
XX
XX New genotyping oligonucleotide, useful for detecting the presence,

```

PT absence or identity of single polynucleotide polymorphism in a nucleic  
PT acid sample.

PS Claim 1; Page 64; 83pp; English.

CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
CC primer extension (SNPE) primers, and the sequences of regions flanking  
CC sites of single nucleotide polymorphisms SNPs. The present invention  
CC includes kits for determining the presence or absence of a SNP, using the  
CC oligonucleotides of the invention. The PCR primers are used to amplify a  
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
CC The oligonucleotides are useful for genotyping a nucleic acid sample by  
CC performing a single-nucleotide primer extension reaction. The  
CC oligonucleotides are useful for determining the presence, absence or  
CC identity of a SNP and for genotyping nucleic acid samples, for e.g., to  
CC assess by association analysis the genotype of an individual or group of  
CC individuals, having a pathological phenotypic trait suspected of being  
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.  
CC agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
CC dystrophy, familial hypercholesterolemia, polycystic kidney disease,  
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
CC traits also include symptoms of or susceptibility to multifactorial  
CC disease of which a component is or may be genetic such as autoimmune  
CC diseases, including, rheumatoid arthritis, multiple sclerosis,  
CC inflammation, cancer, nervous system diseases and infection by pathogenic  
CC microorganism. The method is also useful in forensic investigations and  
CC paternity analysis. The present sequence represents a single nucleotide  
CC primer extension (SNPE) primer specific for a human SNP containing DNA  
CC sequence

SQ Sequence 25 BP; 16 A; 2 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.3%; Score 18.2; DB 1; Length 25;  
Best Local Similarity 87.0%; Pred. No. 62;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1303 CTAATTTTATTTTTCAGAGAC 1325

DB 25 CTTTATTTTATTTTTCAGAGAC 3

RESULT 25

ADB04575 ADB04575 standard; DNA; 25 BP.

AC ADB04575;

XX 20-NOV-2003 (first entry)

DE Human MD27 scanning oligonucleotide SEQ ID 5561.

XX Cytostatic; immunostimulant; gene therapy; vaccine; human;  
XX zinc finger protein; MD23; MD24; MD27; chromosome 7q22.1;  
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
XX developmental disorder; ss.

XX Homo sapiens.

OS Homo sapiens.

PN EPI281758-A2.

PD 05-FEB-2003.

PF 30-JUL-2002; 2002EP-00016874.

PR 02-AUG-2001; 2001US-00922181.

PA (AEOM-) AEOMICA INC.

PI Shannon M, Gu Y, Nguyen C;

PT WPI; 2003-423107/40.

XX New zinc finger-containing proteins and nucleic acids, useful in

PT manufacturing a medicament for treating or preventing a disorder  
PT associated with decreased or increased expression or activity of MD23,  
PT MD24, MD27 or MD212, e.g. cancer.

PS Example 8; SEQ ID NO 5561; 103pp; English.

CC The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is  
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,  
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome  
CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MD23,  
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.

SQ Sequence 25 BP; 4 A; 2 C; 3 G; 16 T; 0 U; 0 Other;

Query Match 1.3%; Score 18.2; DB 1; Length 25;  
Best Local Similarity 87.0%; Pred. No. 62;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1306 TTTTATTTTATTTTTCAGAGACAGA 1328

DB 3 TTTTATTTTATTTTTCAGAGACAGA 25

RESULT 26

ADB04577 ADB04577 standard; DNA; 25 BP.

AC ADB04577;

XX 20-NOV-2003 (first entry)

DE Human MD27 scanning oligonucleotide SEQ ID 5563.

XX Cytostatic; immunostimulant; gene therapy; vaccine; human;  
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;  
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
XX developmental disorder; ss.

XX Homo sapiens.

OS Homo sapiens.

PN EPI281758-A2.

PD 05-FEB-2003.

PF 30-JUL-2002; 2002EP-00016874.

PR 02-AUG-2001; 2001US-00922181.

PA (AEOM-) AEOMICA INC.

PI Shannon M, Gu Y, Nguyen C;

PT WPI; 2003-423107/40.

XX New zinc finger-containing proteins and nucleic acids, useful in  
XX manufacturing a medicament for treating or preventing a disorder  
XX associated with decreased or increased expression or activity of MD23,  
XX MD24, MD27 or MD212, e.g. cancer.

PS Example 8; SEQ ID NO 5563; 103pp; English.

XX The present invention relates to novel human zinc finger-containing  
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is



CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,  
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome  
CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MD23,  
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MD23, MD24, MD27, or MD212 genetic loci. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.

SO Sequence 25 BP; 4 A; 1 C; 4 G; 16 T; 0 U; 0 Other;

Query Match 1.3%; Score 18.2; DB 1; Length 25;  
Best Local Similarity 87.0%; Pred. No. 62;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1306 TTTTATTTTCAGACAGAGA 1328  
DB 1 TTTTATTTTCAGACAGAGA 23

RESULT 27  
ADB04576  
ID ADB04576 standard; DNA; 25 BP.

AC ADB04576;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human MD27 scanning oligonucleotide SEQ ID 5562.  
XX  
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KM zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
OS Homo sapiens.  
XX  
PN EP1281758-A2.  
XX  
PD 05-FEB-2003.  
XX  
PF 30-JUL-2002; 2002EP-00016874.  
XX  
PR 02-AUG-2001; 2001US-00922181.  
XX  
PA (AECOM-) AECOMICA INC.  
XX  
PI Shannon M, Gu Y, Nguyen C;  
XX  
DR WPI; 2003-423107/40.  
XX  
PT New zinc finger-containing proteins and nucleic acids, useful in  
PT manufacturing a medicament for treating or preventing a disorder  
PT associated with decreased or increased expression or activity of MD23,  
PT MD24, MD27 or MD212, e.g. cancer.  
XX  
PS Example 8; SEQ ID NO 5562; 103pp; English.

CC The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is  
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,  
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome  
CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MD23,  
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic

CC acids can also be used as probes to detect and characterize gross  
CC alterations in MD23, MD24, MD27, or MD212 genetic loci. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.

SO Sequence 25 BP; 4 A; 1 C; 4 G; 16 T; 0 U; 0 Other;

Query Match 1.3%; Score 18.2; DB 1; Length 25;  
Best Local Similarity 87.0%; Pred. No. 62;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1306 TTTTATTTTCAGACAGAGA 1328  
DB 2 TTTTATTTTCAGACAGAGA 24

RESULT 28  
AAQ75729/C  
ID AAQ75729 standard; DNA; 21 BP.

AC AAQ75729;  
XX  
DT 04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
XX Analysis; gene expression; reverse transcription; primer; cDNA;  
KM aggregate; restriction enzyme; ss.  
XX  
OS Synthetic.  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
DR WPI; 1995-018287/03.  
XX  
PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.  
XX  
PS Disclosure; Page 8; 11pp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENBSEQ files AAQ7547-075798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily

SO Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.3%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 90;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1516 AATTAAAAAAGTAA 1536  
DB 21 AATTAAAAAAGTAA 1

RESULT 29  
ADK01284/C  
ID ADK01284 standard; DNA; 21 BP.

```
AC ADK01284;
XX
XX 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #4.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.
XX Rattus sp.
OS DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DECS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 4; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or lactic acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.3%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 90;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
RESULT 30
ABL60935/C
ID ABL60935 standard; DNA; 24 BP.
XX
XX ABL60935;
AC
XX
XX 23-SEP-2002 (first entry)
XX
XX Human nucleotide reducing enzyme 59.62 cDNA isolating primer 2.
DE
XX
XX Nucleotide reducing enzyme 59.62; embryo development; teratogenesis;
XX blood system disease; human; RT-PCR; primer; ss.
XX
XX Homo sapiens.
OS
XX
XX CN133352-A.
XX
XX 30-JAN-2002.
XX
XX 07-JUL-2000; 2000CN-00117037.
XX
XX 07-JUL-2000; 2000CN-00117037.
XX
XX (SHAN-) SHANGHAI BIODOOR GENE DEV CO LTD.
XX
XX Mao Y, Xie Y;
XX WPI; 2002-305607/35.
XX
XX Human nucleotide reducing enzyme 59.62 polypeptide and its encoding
XX polynucleotide, for treating e.g. embryo development teratogenesis.
XX
XX Example 2; Page 17 (disclosure); 34pp; Chinese.
XX
XX The invention relates to a novel human nucleotide reducing enzyme 59.62
XX polypeptide and encoding polynucleotide. The polynucleotide, polypeptide
XX and its antagonist are useful for treating e.g. embryo development
XX teratogenesis, blood system disease, and growth development disturbance
XX disease. The present sequence represents the human nucleotide reducing
XX enzyme 59.62 cDNA isolating RT-PCR primer
XX
XX Sequence 24 BP; 6 A; 2 C; 2 G; 14 T; 0 U; 0 Other;
XX
XX Query Match 1.3%; Score 17.8; DB 1; Length 24;
XX Best Local Similarity 90.5%; Pred. No. 79;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1511 CTGTTAATTAAAAAAA 1531
XX 24 CTCTTGATTAATAAAAAAAA 4
XX
XX RESULT 31
XX AAI64714
XX ID AAI64714 standard; DNA; 24 BP.
XX
XX AAI64714;
AC
XX
XX 07-DEC-2001 (first entry)
XX
XX Human peroxidase 18 PCR primer 2.
DE
XX
XX Human; peroxidase 18; cytosolic; viral; immunomodulatory;
XX antiinflammatory; haemostatic; malignant tumour; HIV; infection;
XX human immunodeficiency virus; immunological disease; gene therapy;
XX PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200172980-A1.
XX
XX 04-OCT-2001.
XX
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PF 26-MAR-2001; 2001WO-CN000453.
XX
XX 28-MAR-2000; 2000CN-00115232.
XX
XX (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
XX
XX Mao Y, Xie Y;
XX
XX WPI; 2001-597116/67.
XX
XX Human peroxidase 18 and encoded polynucleotide, used in diagnosis and
PT treatment of malignant tumors, hemopathy, human immunodeficiency virus
PT infection, immunological diseases and inflammation.
XX
XX Example 2; Page 16; 38pp; Chinese.
XX
XX The invention relates to human peroxidase 18 with cytostatic, virucidal,
CC immunomodulatory, antiinflammatory and haemostatic activity. The protein
CC and encoding polynucleotide are used in diagnosis and treatment of
CC malignant tumor, haemopathy, human immunodeficiency virus (HIV)
CC infection, immunological diseases and various inflammations. The
CC polynucleotide is useful for gene therapy. The present sequence is that
CC of a human peroxidase 18 PCR primer, useful to the invention
XX
XX Sequence 24 BP; 4 A; 1 C; 3 G; 16 T; 0 U; 0 Other;
SQ
Query Match 1.3%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 88;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 1291 TGTGTGTTAATCTATTTTTTTA 1314
DB 1 TGTGTTTAAATGATTTTTTTT 24
RESULT 32
ABLS8113
ID ABL58113 standard; DNA; 24 BP.
XX
XX ABL58113;
AC
XX 26-JUN-2002 (first entry)
DT
XX Human serine/threonine protein kinase 15.18 PCR primer #2.
DE
XX Human; cytosolic; serine/threonine protein kinase 15.18; enzyme;
KW embryo development teratogenesis; tumour; PCR; primer; ss.
XX
XX Homo sapiens.
OS
XX CN1331325-A.
PN
XX 16-JAN-2002.
PD
XX 30-JUN-2000; 2000CN-00116980.
PF
XX 30-JUN-2000; 2000CN-00116980.
PR
XX 30-JUN-2000; 2000CN-00116980.
PS
XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.
PA
XX Mao Y, Xie Y;
PI
XX WPI; 2002-340671/38.
DR
XX
XX A human serine/threonine protein kinase 15.18 polypeptide, and the
PT polynucleotide encoding it, for treating e.g. embryo development
PT teratogenesis and tumours.
XX
XX Example 2; Page 19 (Disclosure); 34pp; Chinese.
XX
XX The present invention relates to human serine/threonine protein kinase
CC 15.18 (ABR16999). The kinase and its coding sequence are useful for
CC treating diseases such as embryo development teratogenesis and tumours.
```

```
CC The present sequence is a PCR primer, which was used in an example from
CC the invention
XX
XX Sequence 24 BP; 3 A; 0 C; 5 G; 16 T; 0 U; 0 Other;
SQ
Query Match 1.3%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 88;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 1248 TTGTTGTTTAAATCAGATA 1271
DB 1 TTGTTGTTGTTGTTGAGATA 24
RESULT 33
AC144595
ID AC144595 standard; DNA; 25 BP.
XX
XX AC144595;
AC
XX 13-OCT-2003 (first entry)
DT
XX Human microarray DNA oligonucleotide SEQ ID NO 44586.
DE
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; diallelic marker; polymorphism; human;
KW cross-species comparison.
XX
XX Homo sapiens.
OS
XX US2003104410-A1.
PN
XX 05-JUN-2003.
PD
XX 15-MAR-2002; 2002US-00098263.
PF
XX 16-MAR-2001; 2001US-0276759P.
PR
XX (AFRY-) AFFYMETRIX INC.
PA
XX Miltmann MP;
PI
XX WPI; 2003-567953/53.
DR
XX
XX New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
XX Claim 1; SEQ ID NO 44586; 9pp; English.
PS
XX The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying diallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
```

XX Sequence 25 BP; 6 A; 9 C; 5 G; 5 T; 0 U; 0 Other;  
SQ Query Match 1.3%; Score 17.6; DB 1; Length 25;  
Best Local Similarity 83.3%; Pred. No. 84;  
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 1606 GTCTCGAGAACTGATGACACAA 1629  
Db 2 GTCCCGAGACCTGATCTCACAA 25  
RESULT 34  
ACI85105  
ID ACI85105 standard; DNA; 25 BP.  
XX ACI85105;  
AC ACI85105;  
DT 14-OCT-2003 (first entry)  
DE Human microarray DNA oligonucleotide SEQ ID NO 85096.  
XX  
XX EST, ss: probe: expressed sequence tag; microarray; gene expression;  
KM genetic variation; biallelic marker; polymorphism; human;  
KM cross-species comparison.  
XX Homo sapiens.  
OS  
PN US2003104410-A1.  
XX  
XX 05-JUN-2003.  
PD  
XX 15-MAR-2002; 2002US-00098263.  
PF  
XX 16-MAR-2001; 2001US-0276759P.  
PR  
XX (AFRY-) AFFYMETRIX INC.  
PA  
XX Miltmann MP;  
PI  
XX WPI; 2003-567953/53.  
DR  
XX  
XX New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.  
XX  
XX Claim 1; SEQ ID NO 85096; 9pp; English.  
PS  
XX The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, perfect mismatch, antisense match or antisense mismatch.  
CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the  
CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-  
CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been  
CC isolated and previously sequenced. The sequence presented is one of the  
CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at [seqdata.uspto.gov/sequence.html](http://seqdata.uspto.gov/sequence.html)  
SQ Sequence 25 BP; 3 A; 8 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 1.3%; Score 17.6; DB 1; Length 25;  
Best Local Similarity 83.3%; Pred. No. 84;  
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 1222 CATCTAGGCTTAGTCTCTCA 1245  
Db 2 CGTCTCGATCTTAGTCTCTCA 25  
RESULT 35  
ADE30369/C  
ID ADE30369 standard; RNA; 19 BP.  
XX ADE30369;  
AC ADE30369;  
XX  
DT 29-JAN-2004 (first entry)  
DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:991.  
XX  
XX short interfering nucleic acid; siNA; downregulation; inhibition;  
KM mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
KM cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
KM immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
KM antipruritic; gastrointestinal; obesity; diabetes; tumour;  
KM inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
KM psoriasis; inflammatory bowel disease; drug screening;  
KM genetic engineering; pharmacogenomic; gene mapping; ss.  
XX  
XX Synthetic.  
OS  
XX WO2003072590-A1.  
XX  
XX 04-SEP-2003.  
PD  
XX 28-JAN-2003; 2003WO-US002510.  
PE  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
PA  
XX  
XX Mcwiggan J, Belgelman L, Usman N, Haeblerl P, Chowrira B;  
PI  
XX WPI; 2003-689980/65.  
DR  
XX  
XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of mitogen-activated  
PT protein kinase gene.  
XX  
XX Example 3; SEQ ID NO 991; 164pp; English.  
PS  
XX The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of a mitogen-activated protein kinase  
CC (MAPK) genes by RNA interference. Also described: (1) a method for  
CC modulating expression of MAPK genes in cells, tissue explants or  
CC organisms by introduction of siNA; (2) kits for in vitro or in vivo  
CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
CC vectors that express siNA and cells containing these vectors. MAPK siNAs  
CC have cytostatic, anorectic, antidiabetic, antiinflammatory,  
CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,  
CC antiarthritic, antipruritic and gastrointestinal activities. The MAPK  
CC siNAs can be used to modulate the expression of MAPK genes, in cells,  
CC tissue explants or organisms, e.g. for treating obesity; diabetes types I  
CC and II; a wide range of tumours, and inflammatory diseases (asthma,  
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
CC disease). They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;

CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents a MAPK siNA which is used  
CC in the exemplification of the present invention.  
XX  
SQ Sequence 19 BP; 6 A; 9 C; 4 G; 0 T; 0 U; 0 Other;  
Query Match 1.2%; Score 17.4; DB 1; Length 19;  
Best Local Similarity 94.7%; Pred. No. 1.2e+02;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Oy 547 TGGGTGCGTGTGCGTGCCT 565  
DB 19 TGGGTGCGTGTGCGTGCCT 1  
RESULT 36  
ADE30160  
ID ADE30160 standard; RNA; 19 BP.  
XX  
AC ADE30160;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:782.  
XX  
KM short interfering nucleic acid; siNA; downregulation; inhibition;  
KM mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
KM cytosolic; anorectic; antidiabetic; antiinflammatory; antiaesthetic;  
KM immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
KM antiparietic; gastrointestinal; obesity; diabetes; tumour;  
KM inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
KM prostatic; inflammatory bowel disease; drug screening;  
KM genetic engineering; pharmacogenomic; gene mapping; ss.  
XX  
OS Synthetic.  
XX  
PN WO2003072590-A1.  
XX  
PD 04-SEP-2003.  
XX  
PF 28-JAN-2003; 2003WO-US002510.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (SIRN-) SIRNA THERAPEUTICS INC.  
XX  
PI Mcswijgen J, Beigelman L, Usman N, Haerberli P, Chowrira B;  
XX  
DR WPI: 2003-689980/65.  
XX  
XX  
XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of mitogen-activated  
PT protein kinase genes.  
XX  
XX Example 3; SEQ ID NO 782; 164p; English.  
XX  
XX The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of a mitogen-activated protein kinase  
CC (MAPK) genes by RNA interference. Also described: (1) a method for  
CC modulating expression of MAPK genes in cells, tissue explants or  
CC organisms by introduction of siNA; (2) kits for in vitro or in vivo  
CC delivery of siNA; (3) conjugates and/or complexes of siNA, and (4)  
CC vectors that express siNA and cells containing these vectors. MAPK siNA  
CC have cytosolic, anorectic, antidiabetic, antiinflammatory,  
CC antiaesthetic, immunosuppressive, antibacterial, antineumatic,  
CC antiarthritic, antiparietic and gastrointestinal activities. The MAPK  
CC siNA can be used to modulate the expression of MAPK genes, in cells,

CC tissue explants or organisms, e.g. for treating obesity; diabetes types I  
CC and II; a wide range of tumours, and inflammatory diseases (asthma,  
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
CC disease). They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents a MAPK siNA which is used  
CC in the exemplification of the present invention.  
XX  
SQ Sequence 19 BP; 0 A; 4 C; 9 G; 0 T; 6 U; 0 Other;  
Query Match 1.2%; Score 17.4; DB 1; Length 19;  
Best Local Similarity 63.2%; Pred. No. 1.2e+02;  
Matches 12; Conservative 6; Mismatches 1; Indels 0; Gaps 0;  
Oy 547 TGGGTGCGTGTGCGTGCCT 565  
DB 1 UCGGCGCGUGCGUGCGU 19  
RESULT 37  
AAH44623/C  
ID AAH44623 standard; DNA; 24 BP.  
XX  
AC AAH44623;  
XX  
DT 16-NOV-2001 (first entry)  
XX  
DE Human PD 17 PCR primer 2 SEQ ID NO:4.  
XX  
KM Human; PD 17; cytosolic; virucidal; immunomodulatory; haemostatic;  
KM antinflammatory; gene therapy; malignant tumour; haemopathy;  
KM human immunodeficiency virus infection; HIV infection;  
KM immunological disease; inflammation; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200164729-A1.  
XX  
PD 07-SEP-2001.  
XX  
PF 26-FEB-2001; 2001WO-CN000221.  
XX  
PR 02-MAR-2000; 2000CN-00111868.  
XX  
PA (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.  
XX  
PI Mao Y, Xie Y;  
XX  
DR WPI: 2001-550164/61.  
XX  
XX  
XX New human polypeptide PD 17 for diagnosing and treating malignant tumor,  
PT hemopathy, human immunodeficiency virus (HIV) infection, immunological  
PT diseases and inflammations.  
XX  
XX Example 2; Page 11; 36p; Chinese.  
XX  
XX The present invention describes the human PD 17 protein (I). (I) has  
CC cytosolic, virucidal, immunomodulatory, antiinflammatory and haemostatic  
CC activities. The polynucleotide encoding (I) can be used in gene therapy.  
CC (I) and the polynucleotide encoding it are applicable in the diagnosis  
CC and treatment of malignant tumour, haemopathy, human immunodeficiency  
CC virus (HIV) infection, immunological diseases and various inflammations.  
CC The present sequence represents a PCR primer for human PD 17, which is  
CC used in an example from the present invention  
XX  
SQ Sequence 24 BP; 0 A; 2 C; 1 G; 21 T; 0 U; 0 Other;  
Query Match 1.2%; Score 17.4; DB 1; Length 24;  
Best Local Similarity 94.7%; Pred. No. 98;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Oy 1520 AAAAAAAAAAGTAAAG 1538

```
Db      22  ||||| ||||| |||||
          AAAAAAAAAAGAAAAAG 4
RESULT 38
ABK13715/c
ID      ABK13715 standard; DNA; 24 BP.
XX
XX      ABK13715;
XX
XX      23-APR-2002 (first entry)
XX
DE      RT-PCR primer #2 for human transcriptional activation subunit 14 cDNA.
XX
XX      Human; transcriptional activation subunit 14; malignant neoplasms;
KW      haematopathy; cytostatic; HIV infection; human immunodeficiency virus;
KW      immunological disease; inflammation; virus; immunomodulatory;
KW      antiinflammatory; reverse transcriptase-PCR; RT-PCR; primer; ss.
XX
XX      Homo sapiens.
XX
XX      WO20019403-A1.
XX
XX      13-DEC-2001.
XX
XX      14-MAY-2001; 2001WO-CN000753.
XX
XX      16-MAY-2000; 2000CN-00115720.
XX
XX      (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
XX
XX      Mao Y, Xie Y;
XX
XX      WPI; 2002-090139/12.
XX
XX      Human transcriptional activation subunit 14 and encoding polynucleotide,
XX      used in diagnosis and treatment of malignant tumors, hemopathy, human
XX      immunodeficiency virus infection, immunological diseases and
XX      inflammation.
XX
XX      Example 2; Page 17; 36pp; Chinese.
XX
XX      The present invention relates to the isolation of human transcriptional
XX      activation subunit 14, and the polynucleotide encoding it. Also described
XX      is the process for preparing the protein by DNA recombination and the
XX      application of the polypeptide and polynucleotide in treating various
XX      diseases such as malignant neoplasms, haematopathy, human
XX      immunodeficiency virus (HIV) infection, immunological diseases, and
XX      various inflammations. Antagonists against the polypeptide can also be
XX      used in treating such diseases. The present sequence for reverse
XX      transcriptase (RT)-PCR primer #2 is used with RT-PCR primer #1 (ABK13714)
XX      for isolating cDNA encoding human transcriptional activation subunit 14
XX
XX      Sequence 24 BP; 0 A; 2 C; 2 G; 20 T; 0 U; 0 Other;
XX
XX      Query Match      1.2%; Score 17.4; DB 1; Length 24;
XX      Best Local Similarity 94.7%; Pred. No. 98;
XX      Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY      1520 AAAAAAAAAAGTAAAG 1538
          ||||| ||||| |||||
Db      21 AAAAAAAAAAGAAAAAG 3
RESULT 39
ABA04964
ID      ABA04964 standard; DNA; 24 BP.
XX
XX      ABA04964;
XX
XX      01-MAR-2002 (first entry)
XX
XX      Human FD14 PCR primer #1.
XX
XX      Human FD14 PCR primer #1.
```

```
XX
XX      Human; tumour; embryo maldevelopment; tissue; cytostatic;
KW      immunodeficiency disease; immune disease; immunomodulatory; gene therapy;
KW      PCR primer; ss.
XX
XX      Homo sapiens.
XX
XX      CN131286-A.
XX
XX      12-SEP-2001.
XX
XX      07-MAR-2000; 2000CN-00111937.
XX
XX      07-MAR-2000; 2000CN-00111937.
XX
XX      (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
XX      Mao Y, Xie Y;
XX
XX      WPI; 2002-018504/03.
XX
XX      Human FD14 polypeptides and polynucleotides encoding it.
XX
XX      Example 2; Page 16 (Disclosure); 32pp; Chinese.
XX
XX      The present invention relates to human FD14 (AAM47799). FD14 and its
XX      coding sequence are useful for treating several diseases, such as
XX      malignant tumours, embryo and tissue maldevelopment, immunodeficiency
XX      diseases, various acquired and hereditary disease and immune disease. The
XX      present sequence is a PCR primer, which was used in an example from the
XX      present invention
XX
XX      Sequence 24 BP; 0 A; 6 C; 16 G; 2 T; 0 U; 0 Other;
XX
XX      Query Match      1.2%; Score 17.2; DB 1; Length 24;
XX      Best Local Similarity 86.4%; Pred. No. 1.1e+02;
XX      Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY      422 GAGTGCGGCTCGCGCGCGGC 443
          ||||| ||||| |||||
Db      1 GGTGTGCGCGCGCGCGCGGC 22
RESULT 40
ABL54613
ID      ABL54613 standard; DNA; 24 BP.
XX
XX      ABL54613;
XX
XX      29-MAY-2002 (first entry)
XX
XX      Human EDF-1 protein 9.13 PCR primer SEQ ID NO 4.
XX
XX      Human; EDF-1 protein 9.13; blood vessel development disorder; primer;
KW      haemangioma; tumour; inflammation; immunological disease; PCR; ss.
XX
XX      Homo sapiens.
XX
XX      CN1326956-A.
XX
XX      19-DEC-2001.
XX
XX      05-JUN-2000; 2000CN-00116322.
XX
XX      05-JUN-2000; 2000CN-00116322.
XX
XX      (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
XX      Mao Y, Xie Y;
XX
XX      WPI; 2002-206965/27.
XX
XX      New polypeptide-human EDF-1 protein 9.13 and polynucleotide encoding the
XX
XX      New polypeptide-human EDF-1 protein 9.13 and polynucleotide encoding the
```

PT polypeptide.  
XX  
PS Example 2; Page 17 (Disclosure); 32pp; Chinese.  
XX  
CC The invention relates to human EDF-1 protein 9.13, polynucleotide  
CC encoding this polypeptide and DNA recombinant processes to produce the  
CC polypeptide. The present invention also discloses the method of applying  
CC the polypeptide in treating various diseases, such as blood vessel  
CC development disorder, hemangioma, various tumours, inflammations and  
CC immunological diseases. The present invention also discloses the  
CC antagonist for resisting the polypeptide and its treatment effect. The  
CC present invention also discloses the application of the polynucleotide  
CC for encoding human EDF-1 protein 9.13. The present sequence is that of  
CC the human EDF-1 protein 9.13 PCR primer, useful to examples of the  
CC invention  
XX  
SQ Sequence 24 BP; 5 A; 3 C; 1 G; 15 T; 0 U; 0 Other;  
  
Query Match 1.2%; Score 17.2; DB 1; Length 24;  
Best Local Similarity 86.4%; Pred. No. 1.1e+02;  
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1341 TTACTATATTTTATTTCCCT 1362  
DB 3 TAACTTATTTTATTTTCACT 24  
  
RESULT 41  
ADG16126/C  
ID ADG16126 standard; DNA; 24 BP.  
XX  
AC ADG16126;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Compound activity characterisation-related oligonucleotide SeqID1.  
XX  
KW compound activity characterisation; cellular activity;  
KW phenotypic attribute; candidate medicine; candidate treatment;  
KW multiple biological descriptor; cell marker; ss.  
XX  
OS unidentified.  
XX  
PN WO200181895-A2.  
XX  
PD 01-NOV-2001.  
XX  
PF 24-APR-2001; 2001WO-US013248.  
XX  
PR 26-APR-2000; 2000US-0199778P.  
PR 20-FEB-2001; 2001US-00790214.  
XX  
PA (CYTO-) CYTOKINETICS INC.  
XX  
PI Oesterreicher DR, Sabry JH, Adams CL, Vaisberg EA, Crompton AM;  
XX  
DR WPI; 2002-041423/05.  
XX  
PT Characterizing cellular activity of compound, by receiving images of  
PT cells with known activity and images of cells treated with compound,  
PT characterizing phenotypic attributes of images and comparing the  
PT phenotypes.  
XX  
PS Disclosure; Fig 18; 139pp; English.  
XX  
CC This invention relates to a novel method for the characterisation of the  
CC activity of a compound on cell. The method involves receiving images of  
CC cells with a cellular activity and images of other cells treated with the  
CC compound, quantitatively characterising phenotypic attributes of the  
CC image of cells with a cellular activity to produce a target phenotype for  
CC the cellular activity and that of the image of other cells to produce a  
CC second phenotype for the compound, and comparing the two phenotypes to  
CC determine whether the compound possesses cellular activity. The invention

CC may be useful for characterising cellular activity of a compound, for  
CC determining information about properties of substances based upon the  
CC information about structure of living or non-living cells exposed to  
CC substances. The invention is also useful for identifying promising  
CC candidates in a search for new and better medicines and treatments using  
CC multiple biological descriptors from a single cell markers or components.  
XX  
SQ Sequence 24 BP; 1 A; 0 C; 0 G; 23 T; 0 U; 0 Other;  
  
Query Match 1.2%; Score 17.2; DB 1; Length 24;  
Best Local Similarity 86.4%; Pred. No. 1.1e+02;  
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1516 AATTAAAAAAGTAAAA 1537  
DB 24 AATAAAAAAGTAAAAA 3  
  
RESULT 42  
AAZ26268/C  
ID AAZ26268 standard; DNA; 21 BP.  
XX  
AC AAZ26268;  
XX  
DT 30-NOV-1999 (first entry)  
XX  
DE Human polymorphic region 457.  
XX  
XX  
XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;  
KW cell viability; loss of heterozygosity; precancerous condition; ASI;  
KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
KW graft versus host disease; malignant cell removal; bone marrow; ss.  
XX  
XX  
OS Homo sapiens.  
XX  
PN WO9841648-A2.  
XX  
PD 24-SEP-1998.  
XX  
PF 19-MAR-1998; 98WO-US005419.  
XX  
PR 20-MAR-1997; 97US-0041057P.  
XX  
PA (VARI-) VARIAGENICS INC.  
XX  
PI Housman D, Ledley FD, Stanton VP;  
XX  
DR WPI; 1998-521232/44.  
XX  
XX  
PT Identifying target genes for allele-specific drugs - used for diagnosis,  
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
PT dysplastic lesions, endometriosis or graft versus host disease.  
XX  
PS Disclosure; Fig 7; 605pp; English.  
XX  
CC This invention describes a novel method for identifying an inhibitor  
CC potentially useful for treatment of cancer, where the inhibitor is active  
CC on a gene vital for cell growth or viability, and where the gene is  
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is  
CC used for preventing the development of cancer in a patient having a  
CC precancerous condition, by administering to the patient a first allele  
CC specific inhibitor (ASI) targeted to an allele of a first essential gene  
CC present in cells of the precancerous condition, where the normal somatic  
CC cells of the patient are heterozygous for the first gene, the inhibitor  
CC is active on at least one but less than all allelic forms of the gene  
CC present in a population and targets only one allelic form present in the  
CC normal somatic cells, and the first gene. The products and methods can be  
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
CC graft versus host disease. The method can also be used to remove

CC malignant cells from bone marrow transplants. AA225812-226825 represent  
CC human polymorphic sites described in the method of the invention  
XX  
SQ Sequence 21 BP; 5 A; 0 C; 0 G; 16 T; 0 U; 0 Other;  
  
Query Match 1.2%; Score 17; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
OY 1515 TAAATTAATAAAAAAAAA 1531  
|||||  
DB 21 TTAATTAATAAAAAAAAA 5  
  
RESULT 43  
AA075581/c  
ID AA075581 standard; DNA; 20 BP.  
XX  
AC AA075581;  
XX  
DT 04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
KW Analysis; gene expression; reverse transcription; primer; cDNA;  
KW aggregate; restriction enzyme; ss.  
XX  
OS Synthetic.  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
DR WPI; 1995-018287/03.  
XX  
PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.  
XX  
PS Disclosure; Page 5; 11pp; Japanese.  
XX  
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENSEQ files AA075547-075798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily  
XX  
SQ Sequence 20 BP; 2 A; 0 C; 0 G; 18 T; 0 U; 0 Other;  
  
Query Match 1.2%; Score 16.8; DB 1; Length 20;  
Best Local Similarity 90.0%; Pred. No. 1.6e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
OY 1517 ATTAATAAAAAAAAAAGTAAA 1536  
|||||  
DB 20 ATTAATAAAAAAAAAAAAAA 1  
  
RESULT 44  
AB289546  
ID AB289546 standard; DNA; 20 BP.  
XX  
AC AB289546;  
XX  
DT 17-OCT-2003 (first entry)

XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiaesthetic; hypotensive; immunosuppressive; cytosstatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200265308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nye JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 4788; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiaesthetic, hypotensive,  
CC immunosuppressive, and cyrostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 18 A; 0 C; 0 G; 2 T; 0 U; 0 Other;  
  
Query Match 1.2%; Score 16.8; DB 1; Length 20;  
Best Local Similarity 90.0%; Pred. No. 1.6e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
OY 1518 TTAATAAAAAAAAAAGTAAA 1537  
|||||  
DB 1 TTAATAAAAAAAAAAAAAA 20  
  
RESULT 45  
ABD25776  
ID ABD25776 standard; DNA; 20 BP.  
XX  
AC ABD25776;  
XX  
DT 29-JUL-2004 (first entry)



DE A1085559 DNA fragment.

XX Human, antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion or hyposecretion; antiinflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; ds.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandraaagra A, Katz E, Pabalan J, Aguilar D;  
XX Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.

XX Claim 15; SEQ ID NO 4788; 763bp; English.

XX This invention describes a novel composition (a) a first active agent,  
XX comprising oligonucleotides, effective for alleviating  
XX bronchoconstriction, respiratory tract inflammation, allergies and  
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
XX surfactant depletion or hyposecretion, when administered to a mammal. The  
XX oligonucleotides are derived from a gene encoding or regulating  
XX expression of a target polypeptide associated with lung airway or lung  
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
XX The invention also describes a kit, that comprises: (a) a delivery  
XX device, in separate containers, (b) the oligonucleotides, (c)  
XX instructions for adding a carrier and for use of the kit. The composition  
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
XX beta-adrenergic agonist. The composition is useful for preventing or  
XX treating a respiratory, lung or malignant disease. The administered  
XX composition comprises oligo and is administered to reduce the production  
XX or availability, or to increase the degradation of the target mRNA or to  
XX reduce the amount of target polypeptide present in the lungs. The  
XX pulmonary obstruction, and/or bronchoconstriction and/or lung  
XX inflammation, allergies and/or surfactant hypoproduction are associated  
XX with a disease or condition such as pulmonary vasoconstriction,  
XX inflammation, allergies, asthma, impeded respiration, respiratory  
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
XX hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary  
XX transplantation rejection, pulmonary infections, bronchitis or cancer.  
XX The reduced adenosine content of the anti-sense oligos corresponding to  
XX thymidines present in the target RNA serves to prevent the breakdown of  
XX the oligonucleotides into products that free adenosine into the system  
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
XX prevent any unwanted effects due to it

XX SQ Sequence 20 BP; 18 A; 0 C; 0 G; 2 T; 0 U; 0 Other;

XX Query Match 1.2%; Score 16.8; DB 1; Length 20;  
XX Best Local Similarity 90.0%; Pred. No. 1.6e+02;  
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0

```

Oy      1518 TTTAAAAAGTAAA 1537
Db      1 TTTAAAAAAAAA 20

RESULT 46
ADP78107/c
ID ADP78107 standard; DNA; 20 BP.
XX ADP78107;
XX 12-AUG-2004 (first entry)
DE Chimeric phosphorothioate oligonucleotide #1906.
XX GFAT; Antidiabetic; Cardiant;
KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX reperfusion; ss.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..4
FT /*tag= a
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
FT modified_base 17..20
FT /*tag= b
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
PN WO2004035763-A2.
XX 29-APR-2004.
PD 02-OCT-2003; 2003WO-US033332.
PF 17-OCT-2002; 2002US-0419268P.
PR (PHAA ) PHARMACIA CORP.
XX PA
XX PI Broeschat KO, Crosby SD;
XX WPI; 2004-348453/32.
DR
XX PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
PT ischemia/reperfusion injury.
PS Claim 4; SEQ ID NO 1906; 175pp; English.
XX
XX The present invention relates to a compound which specifically hybridizes
XX with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX modulating the expression of GFAT, and which comprise any of the 3063
XX sequences of 20 base pairs, given in the specification. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX cardiovascular or neurological disorder, ischemia/reperfusion injury.
CC They are also useful in research and diagnostics for modulating the
CC expression of GFAT. The present sequence represents a chimeric
CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
CC oligonucleotides inhibit human GFAT expression.
XX
SQ Sequence 20 BP; 11 A; 2 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 1.2%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred.No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0.

1250 TGTTCGTTTTTATTATCAGA 1265
|||||

```

Db		20	TGTTTGTTTTAATCAAA	1
	RESULT 47			
	ID	ADP78652/c		
		ADP78652 standard; DNA; 20 BP.		
xx				
AC		ADP78652;		
xx				
DT		12-AUG-2004 (first entry)		
DE		Chimeric phosphorothioate oligonucleotide #2451.		
xx				
KW	GfAT; Antidiabetic; Cardiant;			
KM	Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;			
KW	reperfusion; ss.			
OS	Synthetic.			
xx				
PH	Key	Location/Qualifiers		
FT	modified_base	1..4		
FT		/*tag= a		
FT		/mod_base= other		
FT		/note= "2-methoxyethyl wing"		
FT	modified_base	17..20		
FT		/*tag= b		
FT		/mod_base= other		
FT		/note= "2-methoxyethyl wing"		
PN				
PD	WO2004035763-A2.			
XX				
PD	29-APR-2004.			
PE	02-OCT-2003; 2003MO-US033332.			
XX				
PR	17-OCT-2002; 2002US-0419268P.			
PA	(PHMA ) PHARMACIA CORP.			
PB				
PI	Broschat KO, Crosby SD;			
DR	WPI; 2004-348453/32.			
XX				
PT	New compounds, particularly antisense oligonucleotides targeted to a			
PT	nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase			
PT	(GfAT), for treating diabetes, a cardiovascular or neurologic disorder,			
PT	ischemia/reperfusion injury.			
PS				
PS	Claim 4; SEQ ID NO 2451; 175bp; English.			
CC				
CC	The present invention relates to a compound which specifically hybridizes			
CC	with a nucleic acid molecule encoding GfAT, and inhibits the expression			
CC	of GfAT. Specifically claimed are antisense oligonucleotides capable of			
CC	modulating the expression of GfAT, and which comprise any of the 3063			
CC	sequences of 20 base pairs, given in the specification. The compound,			
CC	composition and methods are useful for treating a disease or condition			
CC	associated with GfAT, such as a disease or condition, e.g., diabetes, a			
CC	cardiovascular or neurological disorder, ischemia/reperfusion injury.			
CC	They are also useful in research and diagnosis for modulating the			
CC	expression of GfAT. The present sequence represents a chimeric			
CC	phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these			
CC	oligonucleotides inhibit human GfAT expression.			
XX				
XX				
SEQ	Sequence 20 BP; 12 A; 2 C; 2 G; 4 T; 0 U; 0 Other;			
Query Match	1.2%; Score 16.8; DB 1; Length 20;			
Best Local Similarity	90.0%; Pred.No.1.6e+02;			
Matches 18; Conservative	0; Mismatches 2; Indels 0; Gaps 0			
OY	1248 TTGGTTTGTTTTAATCA 1267			
DB	20 TGCTGTTTGTTTTAATCA 1			

RESULT 48  
 ADP97913/C  
 ID ADP97913 standard; DNA; 20 BP.  
 XX  
 AC ADP97913;  
 XX  
 DT 23-SEP-2004 (first entry)  
 XX  
 DE C. albicans specific gene, CaORF6\_1625, identification primer A.  
 XX  
 KW Diploid fungal cell; allele; gene disruption cassette;  
 KW promoter replacement fragment; antifungal; fungicide; gene therapy;  
 KW infection; Candida albicans; identification; primer; ss.  
 XX  
 OS Candida albicans.  
 OS unidentified.  
 XX  
 PN WO2004056965-A2.  
 XX  
 PD 08-JUL-2004.  
 XX  
 PF 19-DEC-2003; 2003WO-US040618.  
 XX  
 PR 19-DEC-2002; 2002US-0434832P.  
 XX  
 PA (ELIT-) ELITRA PHARM INC.  
 PA (ELIT-) ELITRA CANADA LTD.  
 XX  
 PI Roemer T, Jiang B, Boone C, Buessey H;  
 DR WPI; 2004-500296/47.  
 XX  
 PT Constructing a strain of diploid fungal cells in which both alleles of a  
 PT gene are modified comprises modifying the alleles of a gene in the fungal  
 PT cells by recombination using a gene disruption cassette and a promoter  
 PT replacement fragment.  
 XX  
 PS Claim 36; SEQ ID NO 4018; 163pp; English.  
 XX  
 XX The invention relates to a novel method for constructing a strain of  
 CC diploid fungal cells in which both alleles of a gene are modified. The  
 CC method comprises modifying the alleles of a gene in diploid fungal cells  
 CC by recombination using a gene disruption cassette and a promoter  
 CC replacement fragment. The invention further comprises: assembling a  
 CC collection of diploid fungal cells each of which comprises modified  
 CC alleles of a different gene; a strain of diploid fungal cells comprising  
 CC modified alleles of a gene, where the first allele of the gene is  
 CC inactivated by a gene disruption cassette comprising a nucleotide  
 CC sequence encoding an expressible selectable marker; and the expression of  
 CC the second allele of the gene is regulated by a heterologous promoter  
 CC that is operably linked to the coding region of the second allele of the  
 CC gene, and where the gene encodes the polypeptide mentioned above; a  
 CC collection of diploid fungal strains comprising the diploid strains cited  
 CC above, where substantially all the different genes that encode the above  
 CC amino acid sequences are modified and are present in different diploid  
 CC strains in the collection; a nucleic acid molecule microarray comprising  
 CC nucleic acid molecules, where each nucleic acid molecule comprises a  
 CC nucleotide sequence that is hybridizable to a target nucleotide sequence  
 CC comprising any of the 310 nucleotide sequences listed in the  
 CC specification (ADP98516-ADP98825); identifying a gene that is essential  
 CC to the survival or growth of a fungus, that contributes to the virulence  
 CC and/or pathogenicity of a fungus, or that contributes to the resistance  
 CC of a diploid fungus to an antifungal agent; identifying an antifungal  
 CC agent that inhibits the growth of a diploid fungus; or a therapeutic  
 CC agent for treatment of a mammalian disease; correlating changes in the  
 CC levels of proteins or gene transcripts with the inhibition of growth or  
 CC proliferation of a diploid fungal cell; a purified or isolated nucleic  
 CC acid molecule comprising a nucleotide sequence encoding a gene product  
 CC required for proliferation of Candida albicans, where the gene product  
 CC consists of any of the above-mentioned amino acid sequences; a vector  
 CC comprising a promoter operably linked to the nucleic acid molecule cited  
 CC above; a host cell containing the vector; a purified or isolated

polypeptide comprising any of the 61 amino acid sequences given in the specification (ADP96719-ADP96778): a fusion protein comprising a fragment of a first polypeptide fused to a second polypeptide, the fragment comprising of at least 6 consecutive residues of any of ADP98826-ADP99135; producing a polypeptide; identifying a compound which modulates the activity of a gene product encoded by a nucleic acid comprising any of ADP98516-ADP98825; eliciting an immune response in an animal; a strain of *Candida albicans*, where a first allele of a gene comprising any of ADP98516-ADP98825 is inactive and a second allele of the gene is under the control of a heterologous promoter; identifying a compound or binding partner that binds to the polypeptide comprising any of ADP98826-ADP99135, or its fragment; identifying a compound having the ability to inhibit growth or proliferation of *Candida albicans*; inhibiting growth or proliferation of *Candida albicans* cells; manufacturing an antimycotic compound; treating an infection of a subject by *Candida albicans*, preventing or containing contamination of an object by *Candida albicans*, or for preventing or inhibiting formation on a surface of a biofilm comprising *Candida albicans*; a pharmaceutical composition comprising a therapeutic amount of an agent which reduces the activity or level of a gene product encoded by a nucleic acid comprising any of ADP98516-ADP98825 in a pharmaceutical carrier; an antibody preparation which binds the polypeptide; methods for evaluating a compound against a target gene product encoded by any of ADP98516-ADP98825; identifying an antimycotic compound; a computer or a computer readable medium that comprises at least one of the nucleotide sequences mentioned in the specification or at least one amino acid sequence selected from ADP98826-ADP99135; a method assisted by a computer for identifying a putatively essential gene of a fungus; and a protein array comprising proteins, where at least one protein comprises an amino acid sequence or a portion of an amino acid sequence selected from ADP98516-ADP98825. The novel methods and compositions have fungicide activity. The compositions may be used in gene therapy. The composition and methods are useful for drug screening purposes or for diagnosing, preventing or treating infections associated with *Candida albicans*. These may also be used for constructing strains useful for identification and validation of gene products as effective targets for therapeutic intervention, for identifying and validating gene products as effective targets for therapeutic intervention, and for collecting identified essential genes. This polynucleotide sequence represents an identification primer used in the exemplification of the invention. NOTE: This sequence was downloaded from an electronic sequence listing provided on the WIPO website.

**SQ** Sequence 20 BP; 9 A; 4 C; 7 G; 0 T; 0 U; 0 Other;

Query Match	1.28; Score 16.8; DB 1; Length 20;
-------------	------------------------------------

Best Local Similarity 90.0%; Pred. No. 1.6e+02;

Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0.

```

oy      723 TTTTGCTGTTGCTGCTGCT 742
        |||||
Db      20  TTTTGCTGCTGCTGCT 1

```

RESULT 49  
AAQ75730/c  
ID AAQ75730 standard; DNA; 21 BP

AC AAQ75730;

DT 04-AUG-1995 (First entry)

DE Reverse transcription primer used in cDNA analysis technique.

KW Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

OS Synthetic.

PN JP06303997-A

PD 01-NOV-1994

PF 16-APR-1993; 93JF-00112515.

XX 16-APR-1993; 93JP-00112515.  
PR

PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

DR WPI; 1995-018287/03.

PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.

PS Disclosure; Page 8; 11pp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENBANK files AA075547-Q75798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily

SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match	Score	DB	Length
1.2%	16.8	DB 1	21

Best Local Similarity 90.0%; Pred. No. 1.5e+02;

Matches	18;	Conservative	0;	Mismatches	2;	Indels	0;	Gaps	0;
---------	-----	--------------	----	------------	----	--------	----	------	----

```
QY      1517 ATTAAAAAAGTAAA 1536
          |||||
Db      20 ATTAAAAA 1
```

RESULT 50  
AAQ75732/c  
ID AAQ75732 standard; DNA; 21 BP

AC AAQ75732;

DT 04-AUG-1995 (first entry)

DE Reverse transcription primer used in cDNA analysis technique.

KW Analysis; gene expression; reverse transcription; primer; cDNA;

**KW** aggregate; restriction enzyme; ss.

OS Synthetic.

PN JP06303997-A.

PD 01-NOV-1994

PF 16-APR-1993; 93JP-00112515

PR 16-APR-1993; 93JP-00112515

PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.

DR WPI; 1995-018287/03.

PT Analysis of cDNA and gene expression - by amplification of mRNA followed by digestion with restriction enzymes.

PS Disclosure; Page 8; 11pp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENESQ files A0Q75547-Q75799)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) deriving each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily

SO Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;  
Query Match 1.2%; Score 16.8; DB 1; Length 21;  
Best Local Similarity 90.0%; Pred. No. 1.5e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1512 TGTTAATTAAAAA 1531  
DB 21 TGTAAAAA 2  
RESULT 51  
AAQ75728/C  
ID AAQ75728 standard; DNA; 21 BP.  
XX AAQ75728;  
XX  
XX 04-AUG-1995 (first entry)  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
XX Analysis; gene expression; reverse transcription; primer; cDNA;  
KW aggregate; restriction enzyme; ss.  
OS Synthetic.  
XX JP06303997-A.  
XX  
XX 01-NOV-1994.  
XX  
XX 16-APR-1993; 93JP-00112515.  
XX  
XX 16-APR-1993; 93JP-00112515.  
XX  
XX 16-APR-1993; 93JP-00112515.  
XX  
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
PA  
XX WPI; 1995-018287/03.  
DR  
XX Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.  
XX  
XX Disclosure; Page 8; 11pp; Japanese.  
XX  
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily  
XX  
XX Sequence 21 BP; 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other;  
SQ  
Query Match 1.2%; Score 16.8; DB 1; Length 21;  
Best Local Similarity 90.0%; Pred. No. 1.5e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1517 ATTAATAAAAAAAAAAGTAAA 1536  
DB 20 ATTAATAAAAAAAAAAAAAA 1  
RESULT 52  
AAQ75727/C  
ID AAQ75727 standard; DNA; 21 BP.  
XX AAQ75727;  
XX  
XX 04-AUG-1995 (first entry)  
DT  
XX Reverse transcription primer used in cDNA analysis technique.  
DE  
XX

KW Analysis; gene expression; reverse transcription; primer; cDNA;  
KW aggregate; restriction enzyme; ss.  
XX  
XX Synthetic.  
OS  
XX JP06303997-A.  
XX  
XX 01-NOV-1994.  
XX  
XX 16-APR-1993; 93JP-00112515.  
XX  
XX 16-APR-1993; 93JP-00112515.  
XX  
XX 16-APR-1993; 93JP-00112515.  
XX  
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
PA  
XX WPI; 1995-018287/03.  
DR  
XX  
XX Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.  
XX  
XX Disclosure; Page 8; 11pp; Japanese.  
XX  
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily  
XX  
XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;  
SQ  
Query Match 1.2%; Score 16.8; DB 1; Length 21;  
Best Local Similarity 90.0%; Pred. No. 1.5e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1517 ATTAATAAAAAAAAAAGTAAA 1536  
DB 20 ATTAATAAAAAAAAAAAAAA 1  
RESULT 53  
AAZ45017/C  
ID AAZ45017 standard; DNA; 21 BP.  
XX  
XX AAZ45017;  
AC  
XX 28-FEB-2000 (first entry)  
DT  
XX  
XX UDF-glucuronosyltransferase 1 (UGT1) exon 1E polymorphism C517G.  
DE  
XX  
XX Uridine diphosphate-glucuronosyltransferase 1; UGT1; polymorphism; probe;  
KW glucuronic acid; Crigler-Najjar syndrome; Gilbert syndrome; jaundice;  
KW unconjugated hyperbilirubinaemia; drug metabolism; transgenic animal;  
KW pharmacogenetic screening; diagnose; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO9957322-A2.  
XX  
XX 11-NOV-1999.  
XX  
XX 04-MAY-1999; 99WO-US009702.  
XX  
XX 07-MAY-1998; 98US-0084807P.  
XX  
XX (AYXS-) AYXS PHARM INC.  
PA  
XX Penny L, Galvin M;  
PI  
XX  
XX WPI; 2000-052981/04.  
XX

PT	New nucleic acid representing polymorphisms in the human uridine
PT	diphosphate glucuronyltransferase gene, used for diagnosis and evaluation
PT	of drug metabolism.
XX	
XX	Claim 1; Page 20; 63bp; English.
XX	
CC	AA245004-245041 are human uridine diphosphate-glucuronosyltransferase 1
CC	(UGT1) gene sequence polymorphisms. The nucleotide changes in each
CC	polymorphism are numbered from the A of the first methionine for the exon
CC	in which the polymorphism occurs. The UGTs are a family of enzymes that
CC	catalyze the glucuronic acid conjugation of a wide range of endogenous
CC	and exogenous substrates including phenols, alcohols, amines and fatty
CC	acids. Many of the reactions catalysed by UGTs result in toxic substances
CC	being converted to compounds which are more water soluble and are
CC	excreted. The polymorphism sequences are useful as probes for detecting
CC	UGT1 locus polymorphisms, indicative of altered UGT1 expression or
CC	activity. These polymorphisms are associated with Crigler-Najjar and
CC	Gilbert syndromes (unconjugated hyperbilirubinaemia) and drug metabolism.
CC	The genotyping of the UGT1 gene is used to predict the rate of metabolism
CC	of UGT1 substrates, possible drug-drug interactions and adverse side
CC	effects (i.e. to optimize drug dosage), and to screen for diseases caused
CC	by exposure to toxins and to study the effects of polymorphisms on
CC	enzymatic activity. The UGT1 sequences, including polymorphisms, can also
CC	be used to produce the corresponding protein (or its fragments) or to
CC	generate transgenic animals or modified cells e.g. for pharmacogenetic
CC	screening
XX	
XX	Sequence 21 BP; 1 A; 6 C; 10 G; 4 T; 0 U; 0 Other;
SQ	
Query Match	1.2%; Score 16.8; DB 1; Length 21;
Best Local Similarity	90.0%; Pred. No. 1.5e+02;
Matches 18; Conservative	0; Mismatches 2; Indels 0; Gaps 0
Oy	344 CCTGCGCGCGCCCGCAGAG 363
Db	21 CCAGACCGCGCCCGCAGAG 2
RESULT 54	
ADK01281/c	
ID	ADK01281 standard; DNA; 21 BP.
XX	
AC	ADK01281;
XX	
DT	06-MAY-2004 (first entry)
XX	
DE	Rat DNA microarray capture oligonucleotide #1.
XX	
KW	aa; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW	blood; nerve; germ cell; food additive; food supplement.
XX	
OS	Rattus sp.
XX	
XX	DE10208794-A1.
XX	
XX	04-SEP-2003.
XX	
PD	28-FEB-2002; 2002DE-01008794.
XX	
XX	28-FEB-2002; 2002DE-01008794.
FR	
XX	
XX	(DEGS ) DEGUS&A BIOACTIVES GMBH.
PA	
XX	Boekenkamp D, Dieck HT, Hoppe H;
PI	
XX	WPI; 2003-714082/68.
DR	
XX	
PT	Sorting single-stranded nucleic acid, useful for analyzing expression
PT	patterns and screening active agents, uses capture agent with variable
PT	and constant regions.
XX	
XX	Example; Page 4; 8bp; German.
XX	

```

CC This invention describes a novel method for sorting single-stranded
CC nucleic acid by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particularly sorted single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
CC
XX Sequence 21 BP, 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other:
XX
XX Query Match 1.2%; Score 16.8; DB 1; Length 21;
XX Best Local Similarity 90.0%; Pred. No. 1.5e+02;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy 1518 TTTAAAAAAAAAAGTAAAA 1537
Qy ||||| ||||| |||||
Db 20 TTTAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 55
XX ID ADK01282/c
XX XX ADK01282 standard; DNA; 21 BP.
XX AC ADK01282;
XX DT 06-MAY-2004 (first entry)
XX DE Rat DNA microarray capture oligonucleotide #2.
XX XX
XX sg; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.
XX OS Rattus sp.
XX PN DE10208794-A1.
XX PD 04-SEP-2003.
XX PF 28-FEB-2002; 2002DE-01008794.
XX PR 28-FEB-2002; 2002DE-01008794.
XX PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX DR WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX

```

PT and constant regions.  
XX Example; Page 4; 8pp; German.  
PS  
CC This invention describes a novel method for sorting single-stranded  
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture  
CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
CC least once in each nucleic acid and a 3'-variable, discriminatory region  
CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.  
XX  
SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;  
Query Match 1.2%; Score 16.8; DB 1; Length 21;  
Best Local Similarity 90.0%; Pred. No. 1.5e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
DY 1518 TTTAAAAAAAGTAAAA 1537  
DB 20 TTTAAAAAAAGTAAAA 1  
RESULT 56  
ADK01283/c  
ID ADK01283 standard; DNA; 21 BP.  
XX  
AC ADK01283;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Rat DNA microarray capture oligonucleotide #3.  
XX  
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
KM blood; nerve; germ cell; food additive; food supplement.  
XX  
OS Rattus sp.  
XX  
PN DE10208794-A1.  
XX  
PD 04-SEP-2003.  
XX  
PF 28-FEB-2002; 2002DE-01008794.  
XX  
PR 28-FEB-2002; 2002DE-01008794.  
XX  
PA (DEGS ) DEGUSSA BIOACTIVES GMBH.  
XX  
PI Boekenkamp D, Dieck HT, Hoppe H;  
XX

DR WPI; 2003-714082/68.  
XX  
XX Sorting single-stranded nucleic acid, useful for analyzing expression  
PT patterns and screening active agents, uses capture agent with variable  
PT and constant regions.  
XX  
PS Example; Page 4; 8pp; German.  
XX  
CC This invention describes a novel method for sorting single-stranded  
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture  
CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
CC least once in each nucleic acid and a 3'-variable, discriminatory region  
CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.  
XX  
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;  
Query Match 1.2%; Score 16.8; DB 1; Length 21;  
Best Local Similarity 90.0%; Pred. No. 1.5e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
DY 1518 TTTAAAAAAAGTAAAA 1537  
DB 20 TTTAAAAAAAGTAAAA 1  
RESULT 57  
ADK01329/c  
ID ADK01329 standard; DNA; 21 BP.  
XX  
AC ADK01329;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Rat DNA microarray capture oligonucleotide #49.  
XX  
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
KM blood; nerve; germ cell; food additive; food supplement.  
XX  
OS Rattus sp.  
XX  
PN DE10208794-A1.  
XX  
PD 04-SEP-2003.  
XX  
PF 28-FEB-2002; 2002DE-01008794.  
XX  
PR 28-FEB-2002; 2002DE-01008794.  
XX  
XX

PA	(DEGUS ) DEGUS&A BIOACTIVES GMBH.
XX	
PI	Boekenkamp D, Dieck HT, Hoppe H;
XX	
DR	WPI, 2003-714082/68.
XX	
PT	Sorting single-stranded nucleic acid, useful for analysing expression
PT	patterns and screening active agents, uses capture agent with variable
PT	and constant regions.
XX	
PS	Example; Page 5; 8pp; German.
XX	
CC	This invention describes a novel method for sorting single-stranded
CC	nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC	reading out, where the nucleic acids are selectively bound using capture
CC	agents that are (a) immobilised on the surface of a solid matrix and (b)
CC	comprise variable and non-variable regions. The capture oligonucleotides
CC	have a 5'-invertible anchor region, the complement of which is present at
CC	least once in each nucleic acid and a 3'-variable, discriminatory region
CC	that comprises all possible combinations of up to 10 nucleotides to allow
CC	binding of particular sorts of single stranded nucleic acids. The capture
CC	agents are particularly locked nucleic acids (LNA) and the anchor region
CC	comprises a sequence of 10-50, particularly 15-25, T residues. The
CC	capture oligonucleotides are biotinylated and immobilised on a surface by
CC	interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC	metal, resin, gel, crystalline material and/or membrane, having semi-
CC	conducting properties and especially in the form of a chip. Its surface
CC	is particularly a layer of (bio)molecular filaments and binding of single
CC	stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC	physical, stimulated by an electrical field or through a molecular sieve.
CC	The method is used (i) for analysis of patterns, especially in mucosal,
CC	hair root, blood, nerve or germ cells and (ii) for determining the
CC	activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC	additives or supplements, especially minerals, trace elements, organic
CC	acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC	mixtures. The method provides rapid, inexpensive and reproducible
CC	representation of differences in pools of nucleic acids from cells. It
CC	allows imaging of the complete pattern of all nucleic acid in a cell, and
CC	can detect very small differences in the nucleic acid pool. Since the
CC	method is based on comparison of nucleic acid pools, not individual
CC	genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC	capture probes used in the method of the invention.
XX	
SQ	Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
	Query Match 1.2%; Score 16.8; DB 1; Length 21;
	Best Local Similarity 90.0%; Pred. No. 1.5e+02;
	Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0
OY	1518 TTTAAAAAAAAGTAAAA 1537
DB	21 TTTAAAAAAAAGTAAAA 2
RESULT 58	
ABD25932	
ID	ABD25932 standard; DNA; 21 BP.
XX	
AC	ABD25932;
XX	
DT	29-JUL-2004 (first entry)
XX	
DE	AA505075-derived oligonucleotide SEQ ID 4944.
XX	
KW	Human; antitense; bronchoconstriction; allergy; hyposecretion; pain;
KW	respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW	surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW	analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW	beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW	respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW	emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW	pulmonary transplantation rejection; ss; primer.
XX	

OS	Homo sapiens.
XX	
EN	W0200285309-A2.
XX	
PD	31-OCT-2002.
XX	
PF	23-APR-2002; 2002WO-US013143.
XX	
PR	24-APR-2001; 2001US-0286036P.
XX	
PA	(EPIC-) EPIDEMIS PHARM INC.
PI	Nyee JW, Li Y, Sandraseagra A, Katz E, Pabalan J, Aguilar D;
PI	Miller S, Tang L, Shahabuddin S;
XX	
DR	WPI; 2003-093058/08.
XX	
PT	Pharmaceutical composition for treating asthma, has antisease
PT	oligonucleotide containing less percentage of adenosine, targeted to
PT	nucleic acids associated with lung airway or lung dysfunction, and
PT	bronchodilating agent.
PS	Claim 15; SEQ ID NO 4944; 763pd; English.
XX	
CC	This invention describes a novel composition (a) a first active agent,
CC	comprising oligonucleotides, effective for alleviating
CC	bronchoconstriction, respiratory tract inflammation, allergies and
CC	reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, and
CC	surfactant depletion or hyposecretion, when administered to a mammal. The
CC	oligonucleotides are derived from a gene encoding or regulating
CC	expression of a target polypeptide associated with lung airway or lung
CC	dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC	The invention also describes a kit, that comprises: (a) a delivery
CC	device, in separate containers, (b) the oligonucleotides, (c)
CC	instructions for adding a carrier and for use of the kit. The composition
CC	of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC	analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC	beta-adrenergic agonist. The composition is useful for preventing or
CC	treating a respiratory, lung or malignant disease. The administered
CC	composition comprises oligo and is administered to reduce the production
CC	or availability, or to increase the degradation of the target mRNA or to
CC	reduce the amount of target polypeptide present in the lungs. The
CC	pulmonary obstruction, and/or bronchoconstriction and/or lung
CC	inflammation, allergies and/or surfactant hypoproduction are associated
CC	with a disease or condition such as pulmonary vasoconstriction,
CC	inflammation, allergies, asthma, impeded respiration, respiratory
CC	distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC	hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC	transplantation rejection, pulmonary infections, bronchitis or cancer.
CC	The reduced adenosine content of the anti-sense oligos corresponding to
CC	thymidines present in the target RNA serves to prevent the breakdown of
CC	the oligonucleotides into products that free adenosine into the system
CC	e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC	prevent any unwanted effects due to it
XX	
SQ	Sequence 21 BP; 12 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
	Query Match            1.2%; Score 16.8; DB 1; Length 21;
	Best Local Similarity   90.0%; Pred. No. 1.5e+02;
	Matches     18; Conservative     0; Mismatches       2; Indels       0; Gaps       0
OY	1512 TGTTAATTAAAAAAA 1531
DB	
	2 TGTATTTTAAAAAAAAAA 21
RESULT 59	
ID	ABO73262/C
AC	ABO73262 standard; DNA; 24 BP.
XX	ABO73262;
DT	30-SEP-2002 (first entry)

```
XX DE Human ribosomal protein L312.54 PCR primer 2 SEQ ID NO:4.
XX XX
XX KW Human: ribosomal protein L312.54; malignant tumour; inflammation;
XX KW development disorder; immunological disease; haemopathy; HIV infection;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN CN1339454-A.
XX PD 13-MAR-2002.
XX PF 23-AUG-2000; 2000CN-00119720.
XX PR 23-AUG-2000; 2000CN-00119720.
XX PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX PI Mao Y, Xie Y;
XX DR WPI; 2002-455356/49.
XX PT New polypeptide-ribosomal protein L312.54 and polynucleotide for encoding
XX PT said polypeptide.
XX PS Example 2; Page 17 (Disclosure); 33pp; Chinese.
XX CC The present invention describes human ribosomal protein L312.54 (I). Also
XX CC described is a process for producing (I) using DNA recombination
XX CC technology. (I) and the polynucleotide encoding it can be used for
XX CC treating various diseases, such as malignant tumour, inflammations,
XX CC development disorder, immunological diseases, haemopathy and HIV
XX CC infection. The present sequence represents a PCR primer for (I), which is
XX CC used in an example from the present invention.
XX SQ Sequence 24 BP; 3 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.8; DB 1; Length 24;
XX Best Local Similarity 90.0%; Pred. No. 1.3e+02;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAAAGG 1539
DB 23 AAAAAAAAAACATTAAGG 4
RESULT 60
ABA01630/C
ID ABA01630 standard; DNA; 24 BP.
XX AC ABA01630;
XX DT 05-FEB-2002 (first entry)
XX DE Human RNA helicase 15 PCR primer 1 SEQ ID NO:3.
XX KW Human: RNA helicase 15; cytosolic; virucidal; immunomodulatory;
XX KW antiinflammatory; haemostatic; gene therapy; vaccine; diagnosis; cancer;
XX KW haemopathy; HIV infection; immunological disease; inflammation;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200174872-A1.
XX PD 11-OCT-2001.
XX PF 26-FEB-2001; 2001WO-CN000222.
XX PR 02-MAR-2000; 2000CN-00101873.
XX PA (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
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XX PI Mao Y, Xie Y;
XX DR WPI; 2002-025801/03.
XX PT Human RNA helicase 15 and encoded polynucleotide, applicable in diagnosis
XX PT and treatment of malignant tumor, hemopathy, HIV infection, immunological
XX PT diseases and various inflammations.
XX PS Example 2; Page 12; 37pp; Chinese.
XX CC The present invention describes human RNA helicase 15 (I). (I) and the
XX CC polynucleotide encoding it (II) have cytosolic, virucidal,
XX CC immunomodulatory, antiinflammatory, and haemostatic, and can be used in
XX CC gene therapy and vaccine production. (I) and (II) can be used in the
XX CC diagnosis and treatment of cancer, haemopathy, HIV infection,
XX CC immunological diseases and various inflammations. The present sequence
XX CC represents a PCR primer for human RNA helicase 15, which is used in an
XX CC example from the present invention.
XX SQ Sequence 24 BP; 8 A; 2 C; 9 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.8; DB 1; Length 24;
XX Best Local Similarity 90.0%; Pred. No. 1.3e+02;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1633 CTCCTACCCCTTTGAAAT 1652
DB 20 CTCCTCCCTTTGAAAGT 1
RESULT 61
AA166361/C
ID AA166361 standard; DNA; 24 BP.
XX AC AA166361;
XX DT 23-JAN-2002 (first entry)
XX DE Human phosphatidylinositol-3 kinase 35 cDNA PCR primer #2.
XX KW Human: phosphatidylinositol-3 kinase 35; PTDINS-3 kinase 35; cancer;
XX KW haemopathy; development disorder; HIV infection; immunological disease;
XX KW inflammation; gene therapy; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200175014-A2.
XX PD 11-OCT-2001.
XX PF 16-MAR-2001; 2001WO-CN000328.
XX PR 17-MAR-2000; 2000CN-00114973.
XX PA (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
XX PI Mao Y, Xie Y;
XX DR WPI; 2002-025836/03.
XX PT New human phosphatidylinositol-3 (PTDINS3) kinase 35 for diagnosing and
XX PT treating malignant tumor, hemopathy, human immunodeficiency virus
XX PT infection, immunological diseases and various inflammations.
XX PS Example 2; Page 12; 34pp; Chinese.
XX CC The present invention provides the protein and coding sequences of human
XX CC phosphatidylinositol-3 (PTDINS-3) kinase 35. The sequences can be used in
XX CC the treatment of cancer, haemopathy, HIV infection, development
XX CC disorders, immunological diseases and inflammation. The present sequence
XX CC is a PCR primer for the coding sequence of the invention
```



SQ Sequence 24 BP; 3 A; 0 C; 1 G; 20 T; 0 U; 0 Other;  
Query Match 1.2%; Score 16.8; DB 1; Length 24;  
Best Local Similarity 90.0%; Pred. No. 1.3e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1518 TTTAAAAAGTAAAA 1537  
DB 22 TTTAAAAAGTAAAA 3  
RESULT 62  
ABK12409  
ID ABK12409 standard; DNA; 24 BP.  
AC ABK12409;  
XX 18-JUN-2002 (first entry)  
DT RT-PCR primer #1 for cDNA encoding polypeptide-laminin B210.67.  
XX  
XX RT-PCR primer #1 for cDNA encoding polypeptide-laminin B210.67.  
KM Polypeptide-laminin B210.67; embryo development teratogenesis;  
XX cytosolic; reverse transcriptase-PCR; RT-PCR; primer; ss.  
XX  
XX Unidentified.  
XX  
XX CN128013-A.  
XX  
XX 26-DEC-2001.  
XX  
XX 14-JUN-2000; 2000CN-00116514.  
XX  
XX 14-JUN-2000; 2000CN-00116514.  
XX  
XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.  
XX  
XX Mao Y, Xie Y;  
XX  
XX WPI; 2002-270054/32.  
XX  
XX Polypeptide-laminin B210.67, useful for treating diseases such as embryo  
PT development teratogenesis.  
XX  
XX Example 2; Page 18 (disclosure); 33pp; Chinese.  
XX  
XX The present invention relates to the isolation of polypeptide-laminin  
CC B210.67, and the polynucleotide encoding it. Also described is the  
CC process for preparing the protein by DNA recombination. The polypeptide  
CC is useful for treating diseases such as embryo development teratogenesis.  
CC The present sequence for reverse transcriptase (RT)-PCR primer #1 is used  
CC with RT-PCR primer #2 (ABK12410) for isolating cDNA encoding polypeptide-  
CC laminin B210.67  
XX  
SQ Sequence 24 BP; 19 A; 2 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 1.2%; Score 16.8; DB 1; Length 24;  
Best Local Similarity 90.0%; Pred. No. 1.3e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1518 TTTAAAAAGTAAAA 1537  
DB 5 TTTAAAAAGTAAAA 24  
RESULT 63  
ABK86169  
ID ABK86169 standard; DNA; 24 BP.  
AC ABK86169;  
XX 24-SEP-2002 (first entry)  
DT  
XX  
XX Oligo dt primer #2 used in method to study gene expression.

XX  
XX Oligo dt primer; gene expression analysis; primer; ss.  
KM  
XX  
XX Synthetic.  
OS  
XX WO200236828-A2.  
PN  
XX  
XX 10-MAY-2002.  
PD  
XX  
XX 01-NOV-2001; 2001WO-US045401.  
PF  
XX  
XX 01-NOV-2000; 2000US-0244933P.  
PR  
XX  
XX (GENO-) GENOMIC SOLUTIONS INC.  
PA  
XX  
XX Kane MD, Dombkowski AA, Nagel AC;  
XX  
XX WPI; 2002-508123/54.  
DR  
XX  
XX Identifying and characterizing gene expression in samples, for  
PT identifying mRNA expressed at different levels, comprises employing an  
PT identifier having a Oligo-dt primer of a specific sequence and a  
PT detectable marker at its 5' end.  
XX  
XX  
XX Disclosure; Page 11; 45pp; English.  
XX  
XX The invention relates to systems for identification and characterisation  
CC of gene expression in one or more samples, comprising an identifier having  
CC a specific oligo-dt primer sequence, where the identifier comprises a  
CC detectable marker at its 5' end. The system is useful for identifying any  
CC or all genes expressed in a given in vivo or in vitro RNA sample, as well  
CC as the relative differences in mRNA between 2 or more samples, where  
CC desired, for supporting discovery of new genes, and for identifying mRNAs  
CC that are expressed at different levels between 2 or more samples. The new  
CC system or method addresses limitations of prior methods by comprising  
CC compositions and systems that incorporate new strategies where molecular  
CC or biochemical assay compositions and systems are linked to DNA or RNA  
CC sequence databases for optimal resource efficiency in assaying gene  
CC expression. The system has the following advantages over existing  
CC methods: (a) prior sequence information or clone library construction is  
CC not needed to enable the assay; (b) provides immediate sequence  
CC information in addition to information concerning changes or differences  
CC in mRNA level, to determine mRNA expression level and mRNA identification  
CC in one assay; (c) generates cDNA fragments from all mRNAs present in the  
CC sample for subsequent investigation by common molecular biology  
CC techniques; and (d) does not require prior knowledge of the sequence of  
CC the genome of the organism under investigation and can be employed in  
CC organisms lacking significant genomic sequence in formation. The present  
CC sequence represents an oligo dt primer used in the method of the  
CC invention  
XX  
SQ Sequence 24 BP; 20 A; 0 C; 1 G; 3 T; 0 U; 0 Other;  
Query Match 1.2%; Score 16.8; DB 1; Length 24;  
Best Local Similarity 90.0%; Pred. No. 1.3e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1518 TTTAAAAAGTAAAA 1537  
DB 3 TTTAAAAAGTAAAA 22  
RESULT 64  
ABK86168/C  
ID ABK86168 standard; DNA; 24 BP.  
AC ABK86168;  
XX 24-SEP-2002 (first entry)  
DT  
XX  
XX Oligo dt primer #1 used in method to study gene expression.  
DE  
XX  
XX Oligo dt primer; gene expression analysis; primer; ss.

```
XX OS Synthetic.
XX FN WO200236828-A2.
XX PD 10-MAY-2002.
XX PF 01-NOV-2001; 2001WO-US045401.
XX PR 01-NOV-2000; 2000US-0244933P.
XX PA (GENO-) GENOMIC SOLUTIONS INC.
XX PI Kane MD, Dombkowski AA, Nagel AC;
XX DR WPI, 2002-508123/54.
XX PT Identifying and characterizing gene expression in samples, for
PT identifying mRNA expressed at different levels, comprises employing an
PT identifier having an oligo-dT primer of a specific sequence and a
PT detectable marker at its 5' end.
XX PS Disclosure; Page 11; 45pp; English.
XX CC The invention relates to systems for identification and characterization
CC of gene expression in one or more samples, comprising an identifier having
CC a specific oligo-dT primer sequence, where the identifier comprises a
CC detectable marker at its 5' end. The system is useful for identifying any
CC or all genes expressed in a given in vivo or in vitro RNA sample, as well
CC as the relative differences in mRNA between 2 or more samples, where
CC desired, for supporting discovery of new genes, and for identifying mRNAs
CC that are expressed at different levels between 2 or more samples. The new
CC system or method addresses limitations of prior methods by comprising
CC compositions and systems that incorporate new strategies where molecular
CC or biochemical assay compositions and systems are linked to DNA or RNA
CC sequence databases for optimal resource efficiency in assaying gene
CC expression. The system has the following advantages over existing
CC methods: (a) prior sequence information or clone library construction is
CC not needed to enable the assay; (b) provides immediate sequence
CC information in addition to information concerning changes or differences
CC in mRNA level; (c) determines mRNA expression level and mRNA identification
CC in one assay; (d) generates cDNA fragments from all mRNAs present in the
CC sample for subsequent investigation by common molecular biology
CC techniques; and (e) does not require prior knowledge of the sequence of
CC the genome of the organism under investigation and can be employed in
CC organisms lacking significant genomic sequence information. The present
CC sequence represents an oligo dT primer used in the method of the
CC invention.
XX SQ Sequence 24 BP; 3 A; 1 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.8; DB 1; Length 24;
XX Best Local Similarity 90.0%; Pred. No. 1.3e+02;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1518 TTTAAAAAAGTAAAA 1537
XX |||||
XX 22 TTTAAAAAAGTAAAA 3
XX
XX RESULT 65
XX AAS13049/C
XX ID AAS13049 standard; DNA; 23 BP.
XX AC AAS13049;
XX DT 17-DEC-2001 (first entry)
XX DE Primer #1 used to make reporter plasmid PRS315H16MCS.
XX KM Zinc finger domain; cancer; PCR primer; PRS315H16MCS; ss.
XX OS Synthetic.
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```
XX FN WO200160970-A2.
XX PD 23-AUG-2001.
XX PF 17-FEB-2001; 2001WO-KR000244.
XX PR 18-FEB-2000; 2000KR-00007730.
XX PA (TOOL-) TOOLGEN INC.
XX PI Kim J, Kwon Y, Kim H, Ryu EH, Hwang MS;
XX DR WPI; 2001-557644/62.
XX PT Identifying a zinc finger domain for e.g. designing new polypeptides that
PT bind to a specific site on a DNA, comprises expressing hybrid nucleic
PT acids with a test zinc finger domain in cells.
XX PS Example 4; Page 38; 147pp; English.
XX CC The invention relates to a method of identifying a zinc finger domain
CC that recognises a target site on a DNA. The method comprises expressing a
CC hybrid nucleic acids with a test zinc finger domain in cells containing a
CC reporter construct, where the reporter gene is expressed above a given
CC level when a transcription factor recognises a recruitment site of the promoter.
CC The method is used to: (a) identify a zinc finger domain that recognises
CC a target site on a DNA; (b) determine whether a test zinc finger domain
CC recognises a target site on a promoter; (c) generate a nucleic acid that
CC encodes a chimeric zinc finger protein; and (d) identify DNA sequences
CC recognised by zinc finger domains. The method can be used to design novel
CC polypeptides that bind to a specific site on a DNA. The method can
CC facilitate the customised generation of new polypeptides that can
CC regulate the expression of a selected target e.g. a gene required by a
CC pathogen can be repressed, a gene required for cancerous growth can be
CC repressed, or a gene poorly expressed or encoding a mutated protein can
CC be activated and overexpressed. The method can be used in vivo which
CC enables identification of polypeptides that bind to a specific site on a
CC DNA in the intracellular milieu. The present sequence represents the
CC primer #1 used to make reporter plasmid PRS315H16MCS, which was used in
CC the method of the invention.
XX SQ Sequence 23 BP; 5 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.6; DB 1; Length 23;
XX Best Local Similarity 82.6%; Pred. No. 1.5e+02;
XX Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 440 CGGCGACGATCGCGGCTTAG 462
XX |||||
XX 23 CGTGCAGCAATTCGCGGCTTAG 1
XX
XX RESULT 66
XX ACC41599/C
XX ID ACC41599 standard; DNA; 23 BP.
XX AC ACC41599;
XX DT 21-MAY-2003 (first entry)
XX DE Zinc finger domain related oligonucleotide SEQ ID NO:86.
XX KM Zinc finger domain; zinc finger; zinc finger binding domain; probe;
XX chimeric nucleic acid; library; PCR primer; ss.
XX OS Synthetic.
XX FN WO2003016571-A1.
XX PD 27-FEB-2003.
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PF 17-AUG-2002; 2002WO-KR001560.
XX 17-AUG-2001; 2001US-0313402P.
PR 22-APR-2002; 2002US-0374355P.
XX (TOOL-) TOOLGEN INC.
XX
XX Kim J, Bae K, Park K, Kwon Y, Ryu E, Hwang M;
DR WPI; 2003-268344/26.
XX
PT New library comprising polypeptides having zinc finger domains, useful
PT for producing chimeric nucleic acids.
XX
XX Example 4; Page 54; 234pp; English.
XX
XX The present invention describes a library comprising polypeptides. Each
CC polypeptide comprises a first or second zinc finger domain. The domains
CC of each polypeptide are identical to a zinc finger domain from a
CC naturally occurring protein and either do not occur in the same naturally
CC occurring protein or occur in the same naturally occurring protein in a
CC different configuration than in the polypeptide. The domains vary among
CC polypeptides. Also described: (1) producing chimeric nucleic acids; (2)
CC generating an artificial zinc finger polypeptide that specifically binds
CC to a target DNA site; and (3) identifying a nucleic acid encoding a zinc
CC finger polypeptide that specifically recognises a target DNA site. The
CC library can be used for producing chimeric nucleic acids. ACC41551 to
CC ACC41758 and ABR40919 to ABR41015 represent nucleotide and amino acid
CC sequences given in the exemplification of the present invention
XX
SQ Sequence 23 BP; 5 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
XX
Query Match 1.2%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 1.5e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Oy 440 CGCGCAGCAATCGCGCTCTAG 462
Db 23 CTCGACGCAATTCGCGCTCTG 1
XX
RESULT 67
AAQ30446/C
ID AAQ30446 standard; DNA; 18 BP.
XX
AC AAQ30446;
XX
XX 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)
XX
XX Oligomer TNFR941 for forming triplex with HUMNR target duplex.
DE
XX Human tumour necrosis factor receptor mRNA; AIDS; modified; HIV; RSV;
KW HPV; malignancy; hepatitis; inflammation; ss.
XX
XX Synthetic.
OS
XX Key Location/Qualifiers
FH modified_base 5
FT modified_base /mod_base= a
FT modified_base /mod_base= msc
FT modified_base /mod_base= b
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX
XX MO9209705-A1.
XX
XX 11-JUN-1992.
XX
XX 25-NOV-1991; 91WO-US008811.
XX
XX 23-NOV-1990; 90US-00617907.
XX

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PR 18-JAN-1991; 91US-00643382.
PR 08-APR-1991; 91US-00683420.
PR 17-APR-1991; 91US-00686544.
PR 17-APR-1991; 91US-00686546.
PR 17-APR-1991; 91US-00686547.
PR 27-SEP-1991; 91US-00767733.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
DR WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
PT herpes malignancy and inflammation.
XX
XX Claim 12; Page 72; 77pp; English.
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
CC pH with a purine rich target sequence by coupling into the major groove
CC of the duplex. The specific target sequence of this oligomer is the human
CC tumour necrosis factor receptor mRNA beginning at nucleotide 2354, contg.
CC a purine rich sequence contd. on one strand of the duplex. The oligomer,
CC and others like it are useful in diagnosis and therapy of diseases
CC characterised by specific DNA duplex targets, e.g. HPV, HER, HIV,
CC hepatitis B, herpes, malignant tumours and inflammation. The triple
CC helices form under mild conditions thus assays may be carried out without
CC subjecting the test specimen to harsh conditions. See also AAQ25452-25501
CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.) (Updated
XX on 25-MAR-2003 to correct PD field.)
XX
SQ Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
XX
Query Match 1.2%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 2.2e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Oy 1519 TAAAAAAGTAAA 1536
Db 18 TAAAAAAGTAAA 1
XX
RESULT 68
AAZ72015
ID AAZ72015 standard; DNA; 19 BP.
XX
AC AAZ72015;
XX
XX 10-SEP-2001 (first entry)
DT
XX
XX Human biallelic marker upstream amplification primer SEQ ID NO:6371.
DE
XX
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9954500-A2.
XX
XX 28-OCT-1999.
XX
XX 21-APR-1999; 99WO-IB000822.
XX
XX 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
XX (GEST ) GENSET.
XX
XX Cohen D, Blumentfeld M, Chumakov I;
PI

```

XX	WP1; 2000-013267/01.
XX	
DR	Novel biallelic markers used to construct a high density disequilibrium
PT	map of the human genome.
XX	
PS	Claim 9; Page 1589; 2745pp; English.
XX	
CC	AA265654 to AA269578 represent human biallelic markers from the present
CC	invention, which contain a polymorphic base at position 24 of their
CC	nucleotide sequences. AA269579 to AA277440 represent amplification
CC	primers for the biallelic markers. The biallelic markers of the invention
CC	have a variety of uses: they can be used for high density mapping of the
CC	human genome, and in complex association studies and haplotyping studies
CC	which are useful in determining the genetic basis for disease states.
CC	Compositions and methods of the invention can also be useful for the
CC	identification of the targets for the development of pharmaceutical
CC	agents and diagnostic methods, as well as the characterisation of the
CC	differential efficacious responses to and side effects from
CC	pharmaceutical agents acting on a disease as well as other treatment.
CC	N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC	3367, are not actually given a sequence in the Sequence Listing from the
CC	present invention
XX	
SO	Sequence 19 BP; 7 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
XX	
Oy	Query Match 1.2%; Score 16.4; DB 1; Length 19;
	Best Local Similarity 94.4%; Pred. No. 2.1e+02;
Db	Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Oy	1480 ATTCAGCTATACATTAA 1497
Db	1 ATTCAGCTACACATTAA 18
RESULT 69	
ADP78494/c	
ID	ADP78494 standard; DNA; 20 BP.
XX	
AC	ADP78494;
XX	
DT	12-AUG-2004 (first entry)
XX	
DE	Chimeric phosphorothioate oligonucleotide #2293.
XX	
XX	GFAT; Antidiabetic; Cardiant;
KW	Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
KX	reperfusion; ss.
XX	
OS	Synthetic.
XX	
PH	Key
FT	modified_base
FT	1..4
FT	/*tag= a
FT	/mod_base= other
FT	/note="2-methoxyethyl wing"
FT	17..20
FT	modified_base
FT	17..20
FT	/*tag= b
FT	/mod_base= other
FT	/note="2-methoxyethyl wing"
XX	
PN	WO2004035763-A2.
XX	
PD	29-APR-2004.
XX	
PF	02-OCT-2003; 2003WO-US033332.
XX	
PR	17-OCT-2002; 2002US-0419266P.
XX	
PA	(PHAA ) PHARMACIA CORP.
XX	
PI	Brochat KO, Crosby SD;
XX	

DR WP1; 2004-348453/32.

XX New compounds, particularly antisense oligonucleotides targeted to a  
PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase  
PT (GFAT), for treating diabetes, a cardiovascular or neurological disorder,  
PT ischemia/reperfusion injury.

XX  
PS Claim 4; SEQ ID NO 2293; 175bp; English.

XX  
CC The present invention relates to a compound which specifically hybridizes  
CC with a nucleic acid molecule encoding GFAT, and inhibits the expression  
CC of GFAT. Specifically claimed are antisense oligonucleotides capable of  
CC modulating the expression of GFAT, and which comprise any of the 3063  
CC sequences of 20 base pairs, given in the specification. The compound,  
CC composition and methods are useful for treating a disease or condition  
CC associated with GFAT, such as a disease or condition, e.g. diabetes, a  
CC cardiovascular or neurological disorder, ischemia/reperfusion injury.  
CC They are also useful in research and diagnostics for modulating the  
CC expression of GFAT. The present sequence represents a chimeric  
CC phosphorothioate oligonucleotide with 2'-MO3 wings and a deoxy gap, these  
CC oligonucleotides inhibit human GFAT expression.

XX  
SQ Sequence 20 BP; 11 A; 2 C; 2 G; 5 T; 0 U; 0 Other;

XX  
Query Match 1.2%; Score 16.4; DB 1; Length 20;  
Best Local Similarity 94.4%; Pred. No. 2e+02; Indels 0; Gaps 0

XX  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0

OY 1250 TGGTTGTTTAAATCA 1267  
19 TGGTTGTTTAAATCA 2

DB

RESULT 70  
AAZ26632  
ID AAZ26632 standard; DNA; 21 BP.  
XX  
AC AAZ26632;  
XX  
DT 30-NOV-1999 (first entry)  
XX  
DE Human polymorphic region 821.  
XX  
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;  
KW cell viability; loss of heterozygosity; precancerous condition; ASI;  
KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
KW graft versus host disease; malignant cell removal; bone marrow; ss.  
XX  
OS Homo sapiens.  
XX  
PN MO9841648-A2.  
XX  
PD 24-SEP-1998.  
XX  
PF 19-MAR-1998; 98MO-US005419.  
XX  
PR 20-MAR-1997; 97US-0041057P.  
XX  
PA (VARI-) VARIAGENICS INC.  
XX  
PI Housman D, Ledley FD, Stanton VP;  
XX  
DR WP1; 1998-521232/44.  
XX  
PT Identifying target genes for allele-specific drugs - used for diagnosis,  
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
PT dysplastic lesions, endometriosis or graft versus host disease.  
XX  
PS Disclosure; Fig 7; 605bp; English.  
CC This invention describes a novel method for identifying an inhibitor



```
OS Synthetic.
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
Query Match 1.2%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1302 TCTATTTTTCATTTTCAGA 1322
DB 1 TTTTTCATTTTTCAGA 21
XX
RESULT 74
AAQ75733/C
ID AAQ75733 standard; DNA; 21 BP.
XX
AC AAQ75733;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
```

```
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.2%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1516 AATTAAAAAAAAGTAAA 1536
DB 21 AATTAAAAAAAAGTAAA 1
XX
RESULT 75
AAQ75681/C
ID AAQ75681 standard; DNA; 21 BP.
XX
AC AAQ75681;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
DT Analysis of cDNA and gene expression - by amplification of mRNA followed
DT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 1.2%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1516 AATTAAAAAAAAGTAAA 1536
DB 21 AATTAAAAAAAAGTAAA 1
XX
RESULT 76
AAQ75629/C
ID AAQ75629 standard; DNA; 21 BP.
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```

XX AAQ75629;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.2%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1517 ATTAATAAAAAAAAAAGTAAA 1537
DB 21 ATTCAAAAAAAAAAAAAAAAAA 1

RESULT 77
AAQ75725/C
ID AAQ75725 standard; DNA; 21 BP.
AC
XX
XX AAQ75725;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX 16-APR-1993; 93JP-00112515.
PA
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.

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XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
SQ Sequence 21 BP; 3 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.2%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1516 ATTAATAAAAAAAAAAGTAAA 1536
DB 21 ATTCAAAAAAAAAAAAAAAAAA 1

RESULT 78
AAQ75713/C
ID AAQ75713 standard; DNA; 21 BP.
AC
XX
XX AAQ75713;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX 16-APR-1993; 93JP-00112515.
PA
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 1.2%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;

```

```
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 1516 AATTAAAAAAGTAAA 1536
    |||||
    21 AACTAAAAA 1
Db

RESULT 79
AAQ75680/c
ID AAQ75680 standard; DNA; 21 BP.
XX
XX AAQ75680;
AC
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ

Query Match 1.2%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 1515 TAATTAAAAAAGTAA 1535
    |||||
    21 TAATAAAAA 1
Db

RESULT 80
AAQ75757/c
ID AAQ75757 standard; DNA; 21 BP.
XX
XX AAQ75757;
AC
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
```

```
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
SQ

Query Match 1.2%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 1517 ATTAAAAAAGTAAA 1537
    |||||
    21 ATTAAAAA 1
Db

RESULT 81
AAQ75697/c
ID AAQ75697 standard; DNA; 21 BP.
XX
XX AAQ75697;
AC
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-075798)
```



CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c) the  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily  
XX  
SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;  
Query Match 1.2%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1516 AATTAAAAAAAGTAAA 1536  
DB 21 AAGTAAAAAAAGTAAAAA 1  
RESULT 82  
AAQ75691/C  
ID AAQ75691 standard; DNA; 21 BP.  
XX  
AC AAQ75691;  
XX  
DT 04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
KM Analysis; gene expression; reverse transcription; primer; cDNA;  
KM aggregate; restriction enzyme; ss.  
XX  
OS Synthetic.  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
DR WPI; 1995-018287/03.  
XX  
PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.  
XX  
PS Disclosure; Page 7; 11pp; Japanese.  
XX  
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily  
XX  
SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;  
Query Match 1.2%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1511 CTGTTAATTAAAAAA 1531  
DB 21 CTGTAATAAAAAAA 1  
RESULT 83  
AAQ75761/C  
ID AAQ75761 standard; DNA; 21 BP.  
XX

AC AAQ75761;  
XX  
DT 04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
KM Analysis; gene expression; reverse transcription; primer; cDNA;  
KM aggregate; restriction enzyme; ss.  
XX  
OS Synthetic.  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
DR WPI; 1995-018287/03.  
XX  
PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.  
XX  
PS Disclosure; Page 8; 11pp; Japanese.  
XX  
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily  
XX  
SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;  
Query Match 1.2%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1516 AATTAAAAAAAGTAAA 1536  
DB 21 AATGAAAAAAAGTAAAAA 1  
RESULT 84  
AAQ75721/C  
ID AAQ75721 standard; DNA; 21 BP.  
XX  
AC AAQ75721;  
XX  
DT 04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
KM Analysis; gene expression; reverse transcription; primer; cDNA;  
KM aggregate; restriction enzyme; ss.  
XX  
OS Synthetic.  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX

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DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.2%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1516 AATTAAAAAAGTAA 1536
DB 21 ACTTAAAAAAGTAA 1
XX
XX RESULT 85
XX AAX91367
XX ID AAX91367 standard; DNA; 21 BP.
XX
XX AAX91367;
XX
XX 24-SEP-1999 (first entry)
XX
XX Primer for RT-PCR analysis of T. gondii immunogenic protein DNA.
XX
XX Immunogenic protein; Toxoplasma gondii protein; oocyst shedding; cat;
XX T. gondii infection; enteric apicomplexa oocyst; Cryptosporidium oocyst;
XX Toxoplasma oocyst; RT-PCR primer; ss.
XX
XX Synthetic.
XX Toxoplasma gondii.
XX
XX WO9932633-A1.
XX
XX 01-JUL-1999.
XX
XX 18-DEC-1998; 98WO-US027137.
XX
XX 19-DEC-1997; 97US-00994825.
XX
XX (HESK-) HESKA CORP.
XX
XX Milhausen MJ, Lutz SB, Ng RK;
XX
XX WPI; 1999-418930/35.
XX
XX New isolated Toxoplasma gondii nucleic acids used, e.g. to treat
XX infection caused by this microorganism.
XX
XX Example 2; Page 69; 381pp; English.
XX
XX The invention provides isolated Toxoplasma gondii nucleic acids that
XX encode immunogenic polypeptides. The T. gondii nucleic acid molecules,
XX immunogenic proteins and antibodies to the proteins can be used to
XX inhibit T. gondii oocyst shedding in a cat due to infection with T.
XX gondii. They can be used for preventing T. gondii infection and for
XX preventing the spread of T. gondii infection. They can also be used for
XX detecting T. gondii infection. The detection method can be used to detect
XX parasite cysts or oocysts in feces, e.g. from enteric apicomplexa oocysts
XX such as Cryptosporidium oocysts and Toxoplasma oocysts. Sequences
XX AAX91276-395 primers used in RT-PCR analysis of nucleic acid sequences
```

```
CC encoding immunogenic T. gondii proteins
XX
XX SQ Sequence 21 BP; 4 A; 2 C; 9 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 996 TTCTGTGAGAAATACGCTG 1016
DB 1 TGCTGTGAGAAATACGCTG 21
XX
XX RESULT 86
XX AAZ44349
XX ID AAZ44349 standard; DNA; 21 BP.
XX
XX AAZ44349;
XX
XX 04-APR-2000 (first entry)
XX
XX Protein kinase inhibiting primer #11.
XX
XX Antimicrobial; cytostatic; immunosuppressive; protein kinase;
XX prophylactic; therapy; treatment; cancer; autoimmune disease;
XX pathogenic microorganism; primer; ss.
XX
XX Unidentified.
XX
XX US598596-A.
XX
XX 07-DEC-1999.
XX
XX 04-APR-1995; 95US-00416214.
XX
XX 04-APR-1995; 95US-00416214.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
XX Bergan R, Neckers L;
XX
XX WPI; 2000-104623/09.
XX
XX Oligonucleotides inhibiting protein kinase, useful for treating diseases
XX such as cancer and autoimmune disease.
XX
XX Example 3; Col 27-28; 26pp; English.
XX
XX This invention describes novel purified aptameric oligonucleotides which
XX have antimicrobial, cytostatic and immunosuppressive activity. The
XX oligonucleotides are useful for binding to and preventing or inhibiting
XX the biological function of a protein kinase or a target molecule and for
XX detecting the presence or absence of a target molecule in biological
XX samples. The oligonucleotides are also useful for prophylactic and
XX therapeutic treatment of diseases such as cancer, autoimmune diseases and
XX diseases caused by pathogenic microorganisms. This sequence represents a
XX primer used in the method of the invention
XX
XX SQ Sequence 21 BP; 0 A; 7 C; 14 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 426 GGCGGCTGCGCGCGCGCGAC 446
DB 1 GGCGGCGCGCGCGCGCGCGC 21
XX
XX RESULT 87
XX AAS42690
XX ID AAS42690 standard; DNA; 21 BP.
XX
```

```
AC AAs42690;
XX
XX 17-DEC-2001 (first entry)
DE T. gondii immunogenic protein PCR primer nt65 #2.
XX
XX Immunogenic protein; oocyst; faeces; ss; enteric apicomplexa oocyst;
KM Cryptosporidium oocyst; Toxoplasma oocyst; Giardia cyst; vaccine;
XX oocyst shedding; PCR primer.
XX
XX Toxoplasma gondii.
OS
XX US2001014447-A1.
XX
XX 16-AUG-2001.
PD
XX 18-DEC-1998; 98US-00216393.
XX
XX 19-DEC-1997; 97US-00994825.
XX
XX (MILH) MILHAUSEN M J.
XX
XX Milhausen MJ;
PI
XX WPI; 2001-529100/58.
XX
XX Detecting parasite oocysts or cysts in feces, comprises eluting DNA from
PT sample into aqueous solution by heating, amplifying DNA with primers
PT specific for oocysts or cysts being detected, and detecting amplification
PT product.
XX
XX Example 2; Page 25; 18pp; English.
XX
XX The invention relates to detection of parasite oocysts or cysts in a
XX faeces sample comprising contacting the sample with a solid support,
XX drying and then washing the sample with an aqueous wash solution, adding
XX an aqueous elution solution and eluting DNA from the sample by heating
XX and amplifying by PCR oocyst/cyst-specific DNA and detecting the
XX amplification products. The method is useful for detecting parasite
XX oocysts e.g., enteric apicomplexa oocysts such as Cryptosporidium oocysts
XX or Toxoplasma oocysts, or for detecting parasite cysts e.g. Giardia
XX cysts. The method is also useful for developing vaccines to prevent
XX oocyst shedding in cats. The present sequence is a PCR primer used to
XX isolate DNAs encoding immunogenic proteins from Toxoplasma gondii
XX
XX Sequence 21 BP; 4 A; 2 C; 9 G; 6 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 996 TTCTGTGGAGATTAACGGCTG 1016
DB 1 TCCTGTGGAGATGATGCGCTG 21

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XX
XX WO200214546-A1.
XX
XX 21-FEB-2002.
PD
XX
XX 15-FEB-2001; 2001WO-IB000189.
XX
XX 16-AUG-2000; 2000WO-IB001127.
XX
XX (FRTT) FRITZSCHE M.
XX
XX Fritzsche M;
PI
XX WPI; 2002-241910/29.
XX
XX Use of DNA sequence having fragment of nucleic acid encoding putative
PT microbial virulence factor useful for identification of disease e.g.
PT Alzheimer's disease, caused by mutations or for genetic predisposition.
XX
XX Example 1; Page 22; 52pp; English.
XX
XX The present invention relates to the use of a DNA sequence comprising a
XX fragment of a nucleic acid encoding a putative microbial virulence factor
XX for the identification of a disease caused by mutations or for a genetic
XX predisposition. The invention also relates to a method for identification
XX of a disease which comprises detecting the presence of a mutation within
XX a nucleic acid sequence of the fragment of virulence factor in a tissue-
XX or blood sample of a subject, where the tissue sample is a foetal graft
XX for neurotransplantation and where the sequence is inserted in the 3' UTR
XX (untranslated region) of the gene and mutation is found in the
XX polyadenylation signal of G1. The method is useful for identification of
XX a disease caused by mutation or for their genetic predisposition where
XX the disease is human disease which is from Alzheimer's disease,
XX Parkinson's disease, schizophrenia, myopathy, other forms of dementias
XX (frontotemporal lobe dementia, autosomal dominant Parkinson Lewy-Body
XX dementia, hereditary multi-infarct dementia, familial British dementia,
XX primary X-linked mental retardation) and where the human disease
XX constitutes a predisposition or a genetic variation, the pathological
XX manifestation of which is triggered by medicaments or drugs which is
XX preferably cannabis, where the manifestation comprises any forms of
XX dementia, schizophrenia or related psychiatric disorders. The invention
XX also relates to transgenic animals (e.g. comprising a non-functional
XX endogenous cannabinoid receptor (CB1) gene) which are useful for the
XX identifying or screening of compounds that have an effect on the
XX activity, expression or regulation of the translated protein (e.g. CB1
XX protein). The present sequence is Plasmodium falci-parum integral membrane
XX protein 2B gene fragment. This sequence is used in the exemplification of
XX the invention
XX
XX Sequence 21 BP; 9 A; 0 C; 0 G; 12 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1509 TACTGTTAATTAATAAAAAA 1529
DB 21 TATTTTATTTAAAAAAA 1

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XX US2002064771-A1.
XX
XX 30-MAY-2002.
XX
XX 06-APR-2001; 2001US-00828034.
XX
XX 07-APR-2000; 2000US-0195852P.
XX
XX (ZHON// ZHONG W.
XX (HONG// HONG Z.
XX (FERR// FERRARI E.
XX
XX Zhong W, Hong Z, Ferrari E;
XX
XX WPI, 2002-582330/62.
XX
XX Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
XX nucleotide-long template to which a 2 nucleotide-long primer is annealed,
XX and template and primer which do not form a stable duplex in the absence
XX of HCV NS5B.
XX
XX Example; Page 6; 17pp; English.
XX
XX The invention relates to a replicase complex comprising a hepatitis C
XX virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
XX complementary nucleic acid primer which is annealed to the 3' terminus of
XX the template, where the template is at least three nucleotides and the
XX primer is two or three nucleotides, and the template and primer do not
XX form a stable duplex in solution in the absence of the HCV NS5B protein.
XX The complex is useful for detecting HCV replicase activity and permits
XX establishment of sensitive RNA-dependent RNA polymerase assays to screen
XX and evaluate antiviral inhibitors and to improve the specificity and
XX efficacy of the inhibitors. The complex is also useful in the development
XX of a reliable system for determining kinetic and thermodynamic constants
XX of HCV NS5B-catalysed nucleotide incorporation and investigation of
XX mechanistic inhibitors for mis-incorporation or chain termination.
XX Specifically, the short RNA template and primer pairs are useful in
XX screening assays which are used for determining kinetic, thermodynamic
XX and mechanistic properties of NS5B replication and ultimately in the
XX development of inhibitors of NS5B. Newly identified inhibitors of
XX replicase activity may be used for developing anti-HCV pharmaceuticals.
XX Sequences ABK9271-ABK9296 represent HCV NS5B replicase RNA synthesis
XX templates
XX
XX Sequence 21 BP; 0 A; 14 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 426 GGCGGCTGCGGCGCGGAC 446
XX ||||| ||||| |||||
XX 21 GGCGGCGGCGGCGGCGGC 1
XX
XX RESULT 90
XX ADD24723/C
XX ID ADD24723 standard; DNA; 21 BP.
XX
XX AC ADD24723;
XX
XX 15-JAN-2004 (first entry)
XX
XX Human CYP2E1 mutant T7632A probe H210.
XX
XX diagnostic; pharmaceutical tolerance; side effect; drug; human;
XX allelic variability; polymorphism; phase I; phase II;
XX detoxification mechanism; PCR; primer; NAT2; CYP2D6; CYP1A2;
XX CYP3A4; MEH; TPMT; MTHFR; paraoxonase; CYP2C9; CYP2C19; CYP2E1; DPD; ss.
XX
XX Homo sapiens.
XX
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XX WO2003018837-A2.
XX
XX 06-MAR-2003.
XX
XX 22-AUG-2002; 2002WO-EP009386.
XX
XX 24-AUG-2001; 2001DE-01040651.
XX
XX 30-APR-2002; 2002DE-01019373.
XX
XX (ADNA-) ADNAGEN AG.
XX
XX Maschuetz S, Schnakenberg E, Lustig M;
XX
XX WPI, 2003-290079/28.
XX
XX Diagnostic kit, useful for assessing a subject's tolerance of drugs,
XX comprises reagents for determining alleles of genes encoding
XX detoxification enzymes.
XX
XX Claim 6; Page 80; 156pp; German.
XX
XX This invention describes a novel diagnostic kit for determining tolerance
XX of pharmaceuticals in humans by determining allelic variability of at
XX least two polymorphisms of a human enzyme involved in phase I and/or II
XX of the detoxification mechanism in a blood, tissue or other human sample,
XX where tolerance is determined from presence or absence of alleles. The
XX kit comprises two pairs of oligonucleotide primers, in which each pair
XX amplifies, by PCR, part of a gene for a human detoxification mechanism-
XX associated enzyme. The kit may also contain two further pairs of
XX oligonucleotides, serving as probes for detection of amplified DNA
XX segments, especially where the probes are complementary to a single
XX strand of one allele of the target gene. The probes are labelled with
XX fluorophores (LC-Red640 or LC-Red705 for 5'-labelling or fluorescein for
XX 3'-labelling) which generate a different signal in the hybridized and non
XX -hybridized condition. The enzymes detected include NAT2, CYP2D6, CYP1A2,
XX CYP3A4, MEH, TPMT, MTHFR, paraoxonase, CYP2C9, CYP2C19, CYP2E1 or DPD.
XX The kit is used to determine an individual's tolerance of a particular
XX drug, to establish a suitable dose and/or to predict if a subject will
XX show side-effects to a drug. The kit provides minimally invasive, safe
XX and reliable determination of the metabolic capacity of phase I and/or II
XX enzymes at the molecular level. This sequence represents a probe used in
XX the kit of the invention.
XX
XX Sequence 21 BP; 14 A; 1 C; 1 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1248 TTGCTTTTGTGTTTAAATCAG 1268
XX ||||| ||||| |||||
XX 21 TTTTAAAAATTTTAAATCAG 1
XX
XX RESULT 91
XX ADG17286
XX ID ADG17286 standard; DNA; 21 BP.
XX
XX AC ADG17286;
XX
XX 26-FEB-2004 (first entry)
XX
XX T. gondii sequencing primer #92.
XX
XX Toxoplasma gondii; oocyst shedding; genetic vaccine; vaccine; ss; primer.
XX
XX Toxoplasma gondii.
XX
XX US2003194393-A1.
XX
XX 16-OCT-2003.
XX
XX 17-DEC-2002; 2002US-00321856.
XX
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XX 19-DEC-1997; 97US-00994825.  
PR 18-DEC-1998; 98US-00216393.  
XX (MILH/) MILHAUSEN M J.  
PA Milhaugen MJ;  
XX MPI; 2003-899768/82.  
DR  
XX Novel immunogenic Toxoplasma gondii proteins useful for inhibiting oocyst  
PT shedding by cats infected with Toxoplasma gondii.  
XX  
PS Example 2; SEQ ID NO 236; 198pp; English.  
XX The invention relates to an isolated Toxoplasma gondii protein. The  
CC protein is useful for inhibit oocyst shedding by cats infected with  
CC Toxoplasma gondii. The protein is useful for preventing or ameliorating  
CC diseases caused by infection with T. gondii. The nucleic acid can be used  
CC as genetic vaccine which encodes the protein. The protein and the nucleic  
CC acid are used as diagnostic reagents for detection of T. gondii  
CC infection. The present sequence is used in the exemplification of the  
CC invention.  
SQ Sequence 21 BP; 4 A; 2 C; 9 G; 6 T; 0 U; 0 Other;  
XX  
Query Match 1.2%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 996 TTCTGTGGAGATACGCGTG 1016  
DB 1 TCCTGTGAGATGATGCGTG 21  
RESULT 92  
ADK01296/C  
ID ADK01296 standard; DNA; 21 BP.  
AC ADK01296;  
DT 06-MAY-2004 (first entry)  
XX  
DE Rat DNA microarray capture oligonucleotide #16.  
XX  
KM ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
KW blood; nerve; germ cell; food additive; food supplement.  
XX  
OS Rattus sp.  
XX DE10208794-A1.  
PN 04-SEP-2003.  
PD 28-FEB-2002; 2002DE-01008794.  
PE 28-FEB-2002; 2002DE-01008794.  
PR 28-FEB-2002; 2002DE-01008794.  
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.  
PA Boekenkamp D, Dieck HT, Hoppe H;  
XX MPI; 2003-714082/68.  
DR  
XX Sorting single-stranded nucleic acid, useful for analyzing expression  
PT patterns and screening active agents, uses capture agent with variable  
PT and constant regions.  
XX  
PS Example; Page 5; 8pp; German.  
XX This invention describes a novel method for sorting single-stranded  
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture

CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
CC least once in each nucleic acid and a 3'-variable, discriminatory region  
CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.  
SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
XX  
Query Match 1.2%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1516 AATTAAAAAAGCTAAA 1536  
DB 21 AATTAAAAAAGCTAAA 1  
RESULT 93  
ADK01316/C  
ID ADK01316 standard; DNA; 21 BP.  
AC ADK01316;  
DT 06-MAY-2004 (first entry)  
XX  
DE Rat DNA microarray capture oligonucleotide #36.  
XX  
KM ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
KW blood; nerve; germ cell; food additive; food supplement.  
XX  
OS Rattus sp.  
XX DE10208794-A1.  
PN 04-SEP-2003.  
PD 28-FEB-2002; 2002DE-01008794.  
PE 28-FEB-2002; 2002DE-01008794.  
PR 28-FEB-2002; 2002DE-01008794.  
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.  
PA Boekenkamp D, Dieck HT, Hoppe H;  
XX MPI; 2003-714082/68.  
DR  
XX Sorting single-stranded nucleic acid, useful for analyzing expression  
PT patterns and screening active agents, uses capture agent with variable  
PT and constant regions.  
XX  
PS Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded  
CC nucleic acid by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture  
CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
CC least once in each nucleic acid and a 3'-variable, discriminatory region  
CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query March 1.2%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1517 ATTAAGTAAAAAGTAAAA 1537  
Db 21 ATGAAGTAAAAAGTAAAA 1

RESULT 94  
ADK01292/C  
ID ADK01292 standard; DNA; 21 BP.

XX ADK01292;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #12.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS ) DEGUSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression

PT patterns and screening active agents, uses capture agent with variable  
PT and constant regions.

PS Example; Page 5; Bpp; German.

XX This invention describes a novel method for sorting single-stranded  
CC nucleic acid by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture  
CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
CC least once in each nucleic acid and a 3'-variable, discriminatory region  
CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query March 1.2%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1517 ATTAAGTAAAAAGTAAAA 1537  
Db 21 AGTAAAGTAAAAAGTAAAA 1

RESULT 95  
ADK01332/C  
ID ADK01332 standard; DNA; 21 BP.

XX ADK01332;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #52.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS ) DEGUSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

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XX DR WPI; 2003-714082/68.
XX
XX PT Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 5; 8pp; German.
XX
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of the differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX
XX SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
OY 1517 ATTAAAAAAAAAAGTAAA 1537
DB 21 ATAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 96
XX ADK01288/C
XX ID ADK01288 standard; DNA; 21 BP.
XX AC ADK01288;
XX
XX DE 06-MAY-2004 (first entry)
XX
XX DE Rat DNA microarray capture oligonucleotide #8.
XX
XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.
XX
XX OS Rattus sp.
XX
XX PN DE10208794-A1.
XX
XX PD 04-SEP-2003.
XX
XX PF 28-FEB-2002; 2002DE-01008794.
XX
XX PR 28-FEB-2002; 2002DE-01008794.
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XX PA (DEGS ) DEGUSA BIOACTIVES GMBH.
XX
XX PI Boekenkamp D, Dieck HT, Hoppe H;
XX
XX DR WPI; 2003-714082/68.
XX
XX PT Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 5; 8pp; German.
XX
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of the differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX
XX SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
OY 1517 ATTAAAAAAAAAAGTAAA 1537
DB 21 ACTAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 97
XX ADK01300/C
XX ID ADK01300 standard; DNA; 21 BP.
XX AC ADK01300;
XX
XX DE 06-MAY-2004 (first entry)
XX
XX DE Rat DNA microarray capture oligonucleotide #20.
XX
XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.
XX
XX OS Rattus sp.
XX
XX PN DE10208794-A1.
XX
XX PD 04-SEP-2003.
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XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGUS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI, 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADX01281-ADX01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1517 ATTAAAAAAGTAAAA 1537
XX |||||||||
XX 21 ATCAAAAAAAAAAAAAA 1
XX
XX RESULT 98
XX ADF91593
XX ID ADF91593 standard; DNA; 21 BP.
XX
XX ADF91593;
XX
XX 26-FEB-2004 (first entry)
XX
XX Human caspase-3 mutagenic oligonucleotide #10.
XX
XX ligand binding detection; protein target biological molecule;
XX disulphide-containing protein fragment; ss; human; caspase-3;
XX mutagenesis.
XX
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OS Homo sapiens.
XX
XX US2003194745-A1.
XX
XX 16-OCT-2003.
XX
XX 05-AUG-2002; 2002US-00214419.
XX
XX 26-JUN-1998; 98US-00105372.
XX 07-AUG-2001; 2001US-0310725P.
XX 17-OCT-2001; 2001US-00981547.
XX 21-NOV-2001; 2001US-00990421.
XX 10-APR-2002; 2002US-00121216.
XX
XX (MCDOWELL R S.
XX (FLAN/) FLANAGAN W M.
XX
XX Mcdowell RS, Flanagan WM;
XX
XX WPI; 2004-041266/04.
XX
XX Detection of ligand binding to biological molecules comprises obtaining
XX database comprising coordinates of disulphide-containing protein
XX fragments, each fragment comprising disulphide-bonded cysteine and first
XX adjacent residue.
XX
XX Example 6; SEQ ID NO 103; 40pp; English.
XX
XX The invention relates to a method of detecting ligand binding to
XX biological molecules comprising obtaining a set of coordinates of a three
XX dimensional structure of a protein target biological molecule (TM)
XX having residues, selecting a candidate residue, determining a candidate
XX reference value, and obtaining a database comprising sets of coordinates
XX of disulphide-containing protein fragments, each fragment comprising a
XX disulphide-bonded cysteine and a first adjacent residue. The method is
XX useful for detecting ligand binding to biological molecules. The present
XX sequence is used in the exemplification of the invention.
XX
XX Sequence 21 BP; 5 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 940 GCCTCAGTCACTTCTGTGCC 960
XX |||||||
XX 1 GCCACAGTCACATCTGTACC 21
XX
XX RESULT 99
XX ADH17877
XX ID ADH17877 standard; DNA; 21 BP.
XX
XX ADH17877;
XX
XX 11-MAR-2004 (first entry)
XX
XX Primer (SEQ 11) used to make human caspase-3 large subunit L168C mutant.
XX
XX allosteric site; enzyme; caspase; cysteine aspartate-specific protease;
XX PCR; primer; ss; human; caspase-3; Yama; CPP32 beta; large subunit.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX WO2003087051-A2.
XX
XX 23-OCT-2003.
XX
XX 08-APR-2003; 2003WO-US010831.
XX 08-APR-2002; 2002US-0370938P.
XX
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PA (SUNE-) SUNEIS PHARM INC.  
XX Erlanson DA, Hansen SK, Hardy J, Lam J, O'Brien T;  
XX WPI, 2004-132630/13.  
XX  
XX Identifying an allosteric site in a target having two binding sites  
XX comprises reacting a compound with a reactive group at or near one site  
XX and determining if this produces a change in the other site.  
XX  
XX Example 1; SEQ ID NO 11; 51pp; English.  
XX  
XX The invention relates to a novel method for identifying an allosteric  
XX site in a target having two binding sites comprising reacting a compound  
XX with a reactive group at or near one site and determining if this  
XX produces a change in the other site. The method of the invention may be  
XX used for identifying allosteric sites; for example in proteins such as  
XX enzymes, particularly caspases (cysteine aspartate-specific proteases).  
XX The current sequence is that of the PCR primer (SEQ ID 11) of the  
XX invention which was used to generate a human caspase-3 (Yama; CPP32 beta)  
XX large subunit mutant.  
XX  
XX Sequence 21 BP; 5 A; 8 C; 3 G; 5 T; 0 U; 0 Other;  
XX  
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;  
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX  
XX 940 GCCTCAGTCATCTTCTGCCC 960  
XX 1 GCCACAGTCACATCTGTACC 21  
XX  
XX RESULT 100  
XX ADQ30709  
XX ID ADQ30709 standard; DNA; 21 BP.  
XX  
XX AC ADQ30709;  
XX  
XX DT 23-SEP-2004 (first entry)  
XX  
XX DE Device with substance to aid adhesion of biological material aptamer #3.  
XX  
XX KM aptamer; ss; implant; biological material adhesion; bioreactor.  
XX  
XX OS Synthetic.  
XX  
XX PN WO2004055153-A2.  
XX  
XX PD 01-JUL-2004.  
XX  
XX PF 10-DEC-2003; 2003WO-BP013989.  
XX  
XX PR 17-DEC-2002; 2002DE-01058924.  
XX  
XX PA (UYTU-) UNIV TUEBINGEN EBERHARD-KARLS.  
XX  
XX PI Schluesener H, Wendel H;  
XX  
XX DR WPI, 2004-517421/49.  
XX  
XX PT Device coated with aptamers for binding specific biological materials,  
XX useful e.g. as agent or component of extracorporeal circulation system,  
XX also new aptamers specific for endothelial precursor cells.  
XX  
XX PS Claim 15; SEQ ID NO 3; 31pp; German.  
XX  
XX CC The present invention relates to a device that has at least one surface  
XX that contacts tissue and/or liquids of the human or animal body and is at  
XX least partly coated with a substance that mediates binding of biological  
XX materials. The new feature is that this substance is an aptamer. The  
XX device is particularly an implant, e.g. a stent, vascular prosthesis,  
XX heart valve, joint etc., but may also be a component of an extracorporeal

CC circulation system, a nanomaterial for tissue engineering and vascular  
CC surgery, a catheter, contact lens, storage device for blood etc., also a  
CC bioreactor for isolation and culture of selected cell types, for  
CC production of substances or for growing organ replacements. The present  
CC sequence is an aptamer suitable for use in the device of the invention.  
XX  
XX SQ Sequence 21 BP; 0 A; 7 C; 14 G; 0 T; 0 U; 0 Other;  
XX  
XX Query Match 1.2%; Score 16.2; DB 1; Length 21;  
XX Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX  
XX 424 GTGGCGGCTGGCGCGCCGCGC 444  
XX 1 GCGGCGGCGGCGCGCGCGCGC 21  
XX  
XX RESULT 101  
XX ABA93238  
XX ID ABA93238 standard; DNA; 22 BP.  
XX  
XX AC ABA93238;  
XX  
XX DT 18-APR-2002 (first entry)  
XX  
XX DE PolyA adaptor oligonucleotide SEQ ID NO:1.  
XX  
XX KM Detection; comparative detection; adaptor; ss.  
XX  
XX OS Synthetic.  
XX  
XX PN JP200133800-A.  
XX  
XX PD 04-DEC-2001.  
XX  
XX PF 30-MAY-2000; 2000JP-00160324.  
XX  
XX PR 30-MAY-2000; 2000JP-00160324.  
XX  
XX PA (UNIT-) UNITTECH CO LTD.  
XX  
XX DR WPI, 2002-135950/18.  
XX  
XX PT Comparative detection of the amounts of RNA and DNA.  
XX  
XX PS Disclosure; Page 9; 9pp; Japanese.  
XX  
XX CC The present invention describes a method for the comparative detection of  
XX the amount of an RNA. The method comprises: (a) cDNAs obtained by  
XX transcribing respectively from at least two tissue RNAs are respectively  
XX fragmented by using a same restriction enzyme; (b) each different adaptor  
XX and a common adaptor are added to each of the cDNA fragments derived from  
XX the same or different tissues by the step (a); (c) the resultant adaptor-  
XX added cDNAs are mixed together; (d) an adaptor primer having the common  
XX sequence to said different adaptor and a gene-specific adaptor are used  
XX to amplify said adaptor-added cDNAs containing no region derived from  
XX polyadenylic acid of the mRNA before the addition of the adaptor among  
XX the adaptor-added cDNAs prepared by the step (b); (e) the ratios of the  
XX cDNA amounts are measured between the tissues; (f) the RNA is detected  
XX from the measured result; (g) each different adaptor and a common adaptor  
XX are added to each of the genomic DNA fragments derived from a same or  
XX different individuals; (h) the resultant adaptor-added genomic DNAs are  
XX mixed together; (i) the adaptor-added genomic DNAs are amplified by using  
XX an adaptor primer having the common sequence to the different adaptor and  
XX a sequence-specific adaptor; and (j) the ratios of the amplified amounts  
XX of the genomic DNAs are measured between the individuals. The method is  
XX used for the detection of the amounts of RNA and DNA. The present  
XX sequence represents an oligonucleotide which is used in the  
XX exemplification of the present invention  
XX  
XX SQ Sequence 22 BP; 19 A; 1 C; 1 G; 1 T; 0 U; 0 Other;  
XX  
XX Query Match 1.2%; Score 16.2; DB 1; Length 22;

Best Local Similarity 85.7%; Pred. No. 2e+02; Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1517 ATTAAAAAAAAAGTAAAA 1537  
 |||||  
 DB 2 ATCAAAAAAAAAAAAAAA 22

RESULT 102  
 AAAS9845/c  
 ID AAAS9845 standard; DNA; 23 BP.

XX AAAS9845;

XX 13-OCT-2000 (first entry)

XX PCR primer specific for zeta-COP.

XX Human; capsid-protein; zeta-COP; PCR primer; ss.

XX Homo sapiens.

XX CN1248624-A.

XX 29-MAR-2000.

XX PF 22-SEP-1998; 98CN-00119744.

XX PR 22-SEP-1998; 98CN-00119744.

XX PA (XINH-) XINHUANGPU FUDAN GENE ENG CO LTD SHANGHA.

XX PI Yu L, Tu Q, Fu Q;

XX DR WPI; 2000-431993/38.

XX PT Novel human capsid protein subunit coding sequence.

XX PS Example 1; Page 9; 21pp; Chinese.

XX CC This invention relates to a human gene encoding a capsid protein zeta subunit (zeta-COP). The invention also relates to a zeta-COP protein sequence. The present sequence represents a PCR primer used to amplify the zeta-COP nucleotide sequence

XX SQ Sequence 23 BP; 6 A; 5 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 1.2%; Score 16.2; DB 1; Length 23;

Best Local Similarity 85.7%; Pred. No. 1.9e+02;

Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1110 TTCATTTTCCCCCAGCTGG 1130  
 |||||  
 DB 22 TTCATCTTCCCCCGAGCTGG 2

RESULT 103  
 AA96907/c

ID AA96907 standard; DNA; 20 BP.

XX AA96907;

XX 13-SEP-1999 (first entry)

XX PCR primer used to amplify an ORF of Chlamydia pneumoniae.

XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;

XX sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;

XX neutralising epitope; PCR primer; ss.

XX Synthetic.

XX Chlamydomphila pneumoniae.

PN W09927105-A2.

XX 03-JUN-1999.

XX 20-NOV-1998;

XX 98MO-IB001890.

XX 21-NOV-1997; 97FR-00014673.

XX 04-NOV-1998; 98US-0107078P.

XX (GEST ) GENSET.

XX Griffais R;

XX WPI; 1999-357842/30.

XX PS

XX Page 1862; Disclosure; 1912pp; English.

XX AA91991-X97517 represent PCR primers used to amplify open reading frames

XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae

XX (see AA91990). C. pneumoniae causes respiratory disease such as

XX pneumonia and bronchitis and is thought to be a contributing factor in

XX heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema

XX nodosum or pharyngitis. The polypeptides encoded by the open reading

XX frames of the C. pneumoniae genome (see AA134584- AA135873) can be used

XX in immunogenic compositions as vaccines. Vectors containing C. pneumoniae

XX nucleotide sequences can also be used as immunogenic compositions,

XX especially where the vector directs the expression of a neutralising

XX epitope of C. pneumoniae

XX SQ

XX Sequence 20 BP; 8 A; 2 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 1.1%; Score 16; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 2.4e+02;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1109 TTCATTTTCCCCCC 1124  
 |||||  
 DB 17 TTCATTTTCCCCCC 2

RESULT 104  
 AAQ20030/c  
 ID AAQ20030 standard; DNA; 19 BP.

XX AAQ20030;

XX 01-APR-1992 (first entry)

XX Cross-linking oligomer 116 for targeting HUW11B.

XX deoxyribonucleic acid; major groove; ethanoino group; IL-1;

XX aziridinylcytosine; cross-linking group; o-xyloso linking group;

XX human interleukin-1 beta; inverted polarity region; ss.

XX Synthetic.

XX Key

XX modified\_base

XX 1

XX Location/Qualifiers

XX /\*tag= a

XX /mod\_base= OTHER

XX /note= "N4N4-ethanocytosine"

XX 4

XX /\*tag= b

XX /mod\_base= OTHER

XX /note= "N-methyl-8-oxo-2'-deoxyadenine"

XX 14. .19

XX /\*tag= c

XX /label= inverted polarity\_region

XX /note= "see comments"

XX 14

XX /\*tag= d

XX modified\_base

```
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base
FT 18
FT /*tag= e
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base
FT 19
FT /*tag= f
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT
FT
FT WO9118997-A.
FT
FT PD 12-DEC-1991.
FT
FT PF 25-MAY-1990; 90US-00529346.
FT
FT XX 25-MAY-1990; 90US-00529346.
FT
FT PR 25-MAY-1990; 90US-00529346.
FT
FT XX 14-JAN-1991; 91US-00640654.
FT
FT PA (GILE-) GILEAD SCI INC.
FT
FT PI Matteucci MD, Krawczyk S;
FT
FT DR WPI; 1992-007480/01.
FT
FT PT New sequence-specific non-photo-activated crosslinking agents - bind to
FT the major groove of duplex DNA and are esp. useful for treating latent
FT infections e.g. HIV.
FT
FT PS Example 4; Page 25; 42pp; English.
FT
FT XX This oligomer contains an inverted polarity region formed from an o-
FT CC xyloso dimer synthon. Residues 13 and 14 are linked via an o-xyloso group
FT CC (i.e. nucleotides that have xylose sugar linked via the o-xyloso ring).
FT CC The sequence is designed to target the Human Interleukin-1 beta gene
FT CC beginning at nucleotide 7378 and will covalently cross-link to it via the
FT CC N4N-ethanocytosine group. See also AAQ20026-Q20029
FT
FT SO Sequence 19 BP; 4 A; 1 C; 0 G; 14 T; 0 U; 0 Other;
FT
FT Query Match 1.1%; Score 15.8; DB 1; Length 19;
FT Best Local Similarity 89.5%; Pred. No. 2.8e+02;
FT Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
FT
FT QY 1514 TTAATTAAAAAAGG 1532
FT DB 19 TTAATTAAAAAATAAG 1
FT
FT RESULT 105
FT AAQ030376/C
FT ID AAQ030376 standard; DNA; 19 BP.
FT
FT AC AAQ030376;
FT
FT XX 25-MAR-2003 (revised)
FT DT 07-DEC-1992 (first entry)
FT
FT XX Oligomer HUM beta 116 for forming triplex with IL-1 target duplex.
FT
FT KW Human interleukin - 1 beta gene; herpes simplex; AIDS; modified; HIV;
FT KM RSV; HIV; malignancy; hepatitis; inflammation; ss.
FT
FT OS Synthetic.
FT
FT FH Key Location/Qualifiers
FT FT modified_base 1
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "OTHER= N4 N4 ethanocytosine"
FT FT modified_base 4
FT FT /*tag= b
```

```
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT misc_feature
FT 13. .14
FT /*tag= g
FT /note= "o-xyloso dimer synthon linkage"
FT misc_feature
FT 14. .19
FT /*tag= f
FT /label= inverted polarity_region
FT /note= "see comments"
FT modified_base
FT 14
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base
FT 18
FT /*tag= d
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base
FT 19
FT /*tag= e
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT
FT
FT WO9209705-A1.
FT
FT PD 11-JUN-1992.
FT
FT PF 25-NOV-1991; 91WO-US008811.
FT
FT XX 23-NOV-1990; 90US-00617907.
FT
FT PR 18-JAN-1991; 91US-00643382.
FT
FT PR 08-APR-1991; 91US-00683420.
FT
FT PR 17-APR-1991; 91US-00686544.
FT
FT PR 17-APR-1991; 91US-00686546.
FT
FT PR 27-SEP-1991; 91US-00766733.
FT
FT PA (GILE-) GILEAD SCI INC.
FT
FT PI Froehler B, Krawczyk S, Matteucci MD, Milligan J;
FT
FT DR WPI; 1992-217083/26.
FT
FT PT New oligomers contg. modified bases - which form a triplex with G-C
FT PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
FT PT herpes malignancy and inflammation.
FT
FT XX Claim 12; Page 70; 77pp; English.
FT
FT PS The synthetic oligomer is capable of forming a triplex at physiological
FT XX pH with a purine rich target sequence by coupling into the major groove
FT CC of the duplex. The specific target sequence of this oligomer is the human
FT CC interleukin-1 beta gene beginning at nucleotide 7378 contg. a purine
FT CC rich sequence concd. on one strand of the duplex. The oligomer, and
FT CC others like it are useful in diagnosis and therapy of diseases
FT CC characterised by specific DNA duplex targets, e.g. HPV; HER; HIV,
FT CC hepatitis B, herpes, malignant tumours and inflammation. The triple
FT CC helices form under mild conditions thus assays may be carried out without
FT CC subjecting the test specimen to harsh conditions. The oligomer contains
FT CC an inverted polarity region formed from an o-xyloso dimer synthon. The
FT CC linking sp. is o-xyloso (nucleotides have the 3' positions of xylose
FT CC sugars linked via the o-xyloso ring). Two nucleotides are coupled through
FT CC a xylene residue to form the dimer synthon. This additional modifications
FT CC may render the oligomer stable to nuclease activity. The oligomer is able
FT CC to inhibit gene expression, as verified by in vitro systems. See also
FT CC AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN
FT CC field.)
FT
FT SO Sequence 19 BP; 4 A; 1 C; 0 G; 14 T; 0 U; 0 Other;
FT
FT Query Match 1.1%; Score 15.8; DB 1; Length 19;
FT Best Local Similarity 89.5%; Pred. No. 2.8e+02;
FT Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

OY 1514 TTAATTAAAAAAG 1532  
|||||  
Db 19 TTAATTAAAAAATAAG 1

RESULT 106  
AAQ75552/C  
ID AAQ75552 standard; DNA; 19 BP.

XX AAQ75552;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

XX aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-0012515.

XX 16-APR-1993; 93JP-0012515.

XX (NITE) NIPPO TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed

XX by digestion with restriction enzymes.

XX Disclosure; Page 5; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of  
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
XX labelled reverse transcription primers (GENSEQ files AAQ75547-075798)

XX and using the aggregate of mRNAs as the template for each reverse

XX transcription primer; (b) digesting each of the prepared aggregates of

XX the double-stranded cDNAs with restriction enzyme and; (c) the

XX electrophoresing the digested aggregate of cDNAs in separate lanes. The

XX method can be used to analyse gene expression rapidly and easily

XX Sequence 19 BP; 2 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

OY 1518 TTAATAAAAAAGTAAA 1536

Db 19 TTAATAAAAAAATAA 1

RESULT 107  
ADL79331/C  
ID ADL79331 standard; RNA; 19 BP.

XX ADL79331;

XX 20-MAY-2004 (first entry)

XX Human HER2 (EGFR2) siNA lower strand, SEQ ID NO:496.

XX RNA interference; short interfering nucleic acid; siNA;

XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;

XX short hairpin RNA; shRNA; expression modulation; gene therapy;

XX drug screening; diagnosis; therapeutic target identification;

XX pharmacogenomics; gene function analysis; gene mapping; cancer;

XX cytosolic; human; oncogene; epidermal growth factor receptor; EGFR;

KW HER2; EGFR2; neu; erbB2; c-erb-B-2; ss.

XX Homo sapiens.

XX WO2003070912-A2.

XX 28-AUG-2003.

XX 20-FEB-2003; 2003WO-US005045.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 29-MAY-2002; 2002WO-US016840.

XX 06-JUN-2002; 2002US-00163552.

XX 06-JUN-2002; 2002US-0386782P.

XX 03-JUL-2002; 2002US-0393924P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 19-SEP-2002; 2002US-00251117.

XX 21-OCT-2002; 2002US-00277494.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswigen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;

XX WPI; 2003-697612/66.

XX New short interfering nucleic acid, useful e.g. for treatment and

XX diagnosis of cancer, downregulates expression of the epidermal growth

XX factor receptor gene.

XX Example 3; SEQ ID NO 496; 171pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

XX downregulate expression of one or more human epidermal growth factor

XX receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA

XX interference. The siNA may or may not comprise ribonucleotides and may

XX be double or single stranded. They further comprise sense and antisense

XX regions, or alternatively are assembled from a sense oligonucleotide and

XX an antisense oligonucleotide. Specifically, the siNA include short

XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

XX hairpin RNA (shRNA). The siNA can be unmodified or chemically modified,

XX can contain deoxyribonucleotides, and can be chemically synthesised,

XX expressed from a vector or enzymatically synthesised. The invention also

XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates

XX and/or complexes of siNA; and vectors that express siNA. The siNA are

XX used to modulate expression of EGFR genes in cells, tissue explants or

XX organisms (e.g., by ex vivo gene therapy), or in grafts and transplants

XX for the treatment of a variety of conditions. They may be used for

XX treating a wide range of cancers such as breast and ovarian cancer. The

XX siNA are also useful for drug screening, diagnosis, therapeutic target

XX identification and validation, genetic engineering, pharmacogenomics,

XX studying gene function, and gene mapping (e.g., of single nucleotide

XX polymorphisms). The present sequence represents the lower strand of a

XX HER2 (EGFR2)-targeted double-stranded siNA.

XX Sequence 19 BP; 16 A; 2 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 2.8e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1246 TCTTTGTTTGTGTTTAA 1264

Db 19 TTTTGTGTTTGTGTTTAA 1

RESULT 108  
ADL79082  
ID ADL79082 standard; RNA; 19 BP.

XX

AC ADL79082;  
 XX  
 XX 20-MAY-2004 (first entry)  
 XX  
 DE Human HER2 (EGFR2) transcript target sequence/siNA upper strand, SEQ:247.  
 XX  
 XX RNA interference; short interfering nucleic acid; siNA;  
 KM short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KM short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KM drug screening; diagnosis; therapeutic target identification;  
 KM pharmacogenomics; gene function analysis; gene mapping; cancer;  
 KM cytotoxic; human; oncogene; epidermal growth factor receptor; EGFR;  
 KM HER2; EGFR2; neu; erbB2; c-erbB-2; target sequence; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003070912-A2.  
 XX  
 PD 28-AUG-2003.  
 XX  
 PF 20-FEB-2003; 2003WO-US005045.  
 XX  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 29-MAY-2002; 2002WO-US016840.  
 PR 06-JUN-2002; 2002US-0016355Z.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 03-JUL-2002; 2002US-0395924P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 19-SEP-2002; 2002US-00251117.  
 PR 21-OCT-2002; 2002US-0027749P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI McSwiggen J, Pavco P, Belgelman L, Foenbaugh K, Jamison S;  
 XX  
 DR WPI; 2003-697612/66.  
 XX  
 PT New short interfering nucleic acid, useful e.g. for treatment and  
 PT diagnosis of cancer, downregulates expression of the epidermal growth  
 PT factor receptor gene.  
 XX  
 PS Example 3; SEQ ID NO 247; 171bp; English.  
 XX  
 CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of one or more human epidermal growth factor  
 CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesized.  
 CC expressed from a vector or enzymatically synthesized. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA, conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of EGFR genes in cells, tissue explants or  
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants  
 CC for the treatment of a variety of conditions. They may be used for  
 CC treating a wide range of cancers such as breast and ovarian cancer. The  
 CC siNAs are also useful for drug screening, diagnosis, therapeutic target  
 CC identification and validation, genetic engineering, pharmacogenomics,  
 CC studying gene function, and gene mapping (e.g., of single nucleotide  
 CC polymorphisms). The present sequence represents the upper strand of a  
 CC human HER2 (EGFR2)-targeted double-stranded siNA, which is identical to  
 CC the HER2 transcript target sequence.  
 CC  
 XX Sequence 19 BP; 1 A; 0 C; 2 G; 0 T; 16 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 19;  
 Best Local Similarity 15.8%; Pred. No. 2.8e+02;  
 Matches 3; Conservative 14; Mismatches 2; Indels 0; Gaps 0;  
 Oy 1246 TCTTGTGTTGTTTAA 1264  
 Db 1 UUUUUUUUUUUUUUUA 19  
 RESULT 109  
 AA068869  
 ID AA068869 standard; DNA; 20 BP.  
 XX  
 AC AA068869;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 22-MAY-1995 (first entry)  
 XX  
 DE Self paired oligonucleotide (SA12) used in antisense therapy.  
 XX  
 KM Oligonucleotide; antisense; self paired; nuclease resistant;  
 KM dermatological disorders; viral infection; cancer; atypical dermatitis;  
 KM psoriasis; melanoma; T cell lymphoma; herpes simplex; papilloma;  
 KM hepatitis; HIV; human immunodeficiency virus; oncogene; collagenase;  
 KM elastase; bone marrow graft; ss.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_structure 13..20  
 FT /\*tag= a  
 FT /label= Hairpin loop.  
 XX  
 FN FR2703053-A1.  
 XX  
 PD 30-SEP-1994.  
 XX  
 PF 26-MAR-1993; 93FR-00003514.  
 XX  
 PR 26-MAR-1993; 93FR-00003514.  
 XX  
 PA (GEST ) GENSET.  
 XX  
 PI Vasseur M, Blumenfeld M, Megueni S, Poddevin B;  
 XX  
 DR WPI; 1994-312170/39.  
 XX  
 PT New oligo:nucleotide(s) self paired at one or both ends - have improved  
 PT resistance to nuclease(s) and reduced toxicity, useful as anti-sense  
 PT molecules for treating dermatological disorders, virus infections,  
 PT cancer, etc.  
 XX  
 PS Example 1; Fig 4a; 40bp; French.  
 XX  
 CC The new hooked or semi-hooked oligonucleotides (see AA068869-71,  
 CC AA068873, AA068875, AA068877, AA068879 and AA068880) are useful as  
 CC therapeutic antisense molecules for treating dermatological disorders  
 CC (e.g. atypical dermatitis, psoriasis, melanoma, T cell lymphoma etc.)  
 CC viral infections (e.g. herpes simplex, papilloma, hepatitis or HIV); or  
 CC cancer (when directed against an oncogene), due to their ability to  
 CC hybridise with target nucleic acid. They can be used ex vivo, e.g., to  
 CC treat bone marrow grafts. They can also be used for diagnosis or in  
 CC cosmetics e.g. to block mRNA coding proteins involved in the ageing  
 CC process such as collagenase or elastase. Compared with linear antisense  
 CC molecules, the hooked or semi-hooked oligonucleotides are more resistant  
 CC to exonucleases and less toxic because they are less likely to hybridise  
 CC with partially complementary non-target sequences. (Updated on 25-MAR-  
 CC 2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PA field.)  
 XX  
 SQ Sequence 20 BP; 15 A; 2 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.7e+02;

```

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAG 1538
   |||||
   1 AAAAAAAAAAGCAAG 19
Db

RESULT 110
AAQ75579/c
ID AAQ75579 standard; DNA; 20 BP.
XX
XX AAQ75579;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
OS Synthetic.
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
XX Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1518 TTTAAAAAAAGTAAA 1536
   |||||
   19 TTTAAAAAAAGTAAA 1
Db

RESULT 111
AAQ75582/c
ID AAQ75582 standard; DNA; 20 BP.
XX
XX AAQ75582;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS

```

```

XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
XX Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1513 GTTAAATTAAAAA 1531
   |||||
   20 GTTAAATTAAAAA 2
Db

RESULT 112
AAQ75580/c
ID AAQ75580 standard; DNA; 20 BP.
XX
XX AAQ75580;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
OS Synthetic.
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
XX Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
SQ

```

CC and using the aggregate of mRNAs as the template for each reverse  
 CC transcription primer; (b) digesting each of the prepared aggregates of  
 CC the double-stranded cDNAs with restriction enzyme and; (c) electrophorese  
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
 CC method can be used to analyse gene expression rapidly and easily  
 CC  
 SQ Sequence 20 BP; 3 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1518 TTAAGTAAAGTAA 1536

DB 19 TTAAGTAAAGTAA 1

RESULT 113  
 AAT04916/C  
 ID AAT04916 standard; CDNA; 20 BP.

AC AAT04916;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 15-MAY-1996 (first entry)

XX Mammalian stem cell factor (SCF) cDNA oligonucleotide primer 220-7.

XX Stem cell factor; progenitor; haematopoiesis; SCF; anaemia;  
 KW thrombocytopenia; leucopenia; AIDS; immunodeficiency; bone graft;  
 KW transplant; neoplasia; myelosuppression; bone marrow; ss.

XX Synthetic.

PN EP676470-A1.

XX 11-OCT-1995.

PF 04-OCT-1990; 95EP-00105391.

PR 16-OCT-1989; 89US-00422383.

PR 11-JUN-1990; 90US-00537198.

PR 24-AUG-1990; 90US-00573616.

PR 28-SEP-1990; 90MO-US005548.

PR 01-OCT-1990; 90US-00589701.

XX (AMGE-) AMGEN INC.

PI Zsabo KM, Sugge SV, Boeselman RA, Martin FH;

XX WPI; 1995-346090/45.

XX New stem cell factor polypeptide(s) - for stimulating the growth of  
 PT primitive progenitor cells, esp. for treating disorders involving blood  
 PT cells.

XX Example 3; Fig 12C; 127bp; English.  
 CC AAT04915-104922 are oligonucleotide primers and probes used for the  
 CC amplification and sequencing of mammalian stem cell factor (SCF). Non-  
 CC naturally occurring SCF and C-terminally truncated polypeptides, having  
 CC amino acid sequences sufficiently duplicative of naturally occurring SCF,  
 CC stimulate growth of primitive progenitors such as haematopoietic  
 CC progenitor cells, neural stem cells and primordial germ stem cells. The  
 CC peptides can be used in a composition for treating leucopenia, anaemia or  
 CC thrombocytopenia, for enhancing engraftment of bone marrow during  
 CC transplantation or for bone marrow recovery after chemotherapy or  
 CC radiation-induced bone marrow aplasia or myelosuppression. They can also  
 CC be used for treating neoplasia, nerve damage, infertility, intestinal  
 CC damage or myeloproliferative disorders. Antibodies may be raised against  
 CC the peptides for use in detection or neutralisation of SCF in serum. SCF  
 CC may be useful for the treatment of AIDS and severe combined  
 CC immunodeficiency (SCID) states alone or in combination with other factors

CC such as IL-7. (Updated on 25-MAR-2003 to correct PF field.)  
 XX  
 SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1519 TTAAGTAAAGTAA 1537

DB 19 TTAAGTAAAGTAA 1

RESULT 114  
 AAV07752/C  
 ID AAV07752 standard; DNA; 20 BP.

AC AAV07752;  
 XX  
 DT 07-DEC-1998 (first entry)

XX Phosphorothioate oligonucleotide.

XX Phosphorothioate; sulphurisation; heterocycle; automated synthesis;

XX antisense; EDIT; Beaucage reagent; ss.

XX Synthetic.

OS Key Location/Qualifiers

FN misc\_feature 1..20

FT /tag= a  
 FT /note= "phosphorothioate internucleotide linkages"

XX MO9741130-A2.

XX 06-NOV-1997.

XX 29-APR-1997; 97MO-US007118.

XX 30-APR-1996; 96US-00641920.

XX (MINU ) UNIV MINNESOTA.

PA (LOU ) UNIV LOUISIANA STATE & AGRIC.

PI Barany G, Musier-Forsyth K, Xu Q, Chen L, Hammer RP;

XX WPI; 1997-549671/50.

XX Sulphurisation of phosphorus-containing compounds, e.g.  
 PT oligo:nucleotide(s) - by contacting the compound with a di:sulphide-  
 PT containing five-membered heterocycle.

XX Example 7; Page 30; 51bp; English.

CC The present invention provides a method for sulphurising phosphorus-  
 CC containing compounds. It comprises contacting the phosphorus-containing  
 CC compound with a 1,2,4-dithiazolidine-2,5-dione compound or a 3-  
 CC substituted-1,2,4-dithiazolidine-5-one compound. The method is especially  
 CC useful for incorporation of phosphorothioate linkages into biologically  
 CC important molecules such as DNA, RNA and phosphopeptides. Molecules  
 CC containing such linkages are useful e.g. as antisense compounds for  
 CC inhibiting gene expression, as reagents for studying DNA-protein or RNA-  
 CC protein interactions, or as catalytic RNA. The present sequence  
 CC represents an oligonucleotide with phosphorothioate linkages prepared by  
 CC the method of the invention

SQ Sequence 20 BP; 1 A; 0 C; 0 G; 0 T; 19 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1519 TTAAGTAAAGTAA 1537

```
Db      20 TAAAAAAAAAAAAAAAAA 2
RESULT 115
AAV47686
ID      AAV47686 standard; DNA; 20 BP.
XX
AC
DT      20-NOV-1998 (first entry)
XX
DE      Unmethylated CpG dinucleotide 2001.
XX
KW      Unmethylated CpG dinucleotide; immune response; bacterial meningitis;
KW      natural killer cell activation; NK cell; Th2 response; neonatal sepsis;
KW      pulmonary disorder; asthma; environmentally induced airway disease;
KW      bacterial infection; endotoxaemia; therapy; cystic fibrosis;
KW      inflammatory bowel disease; ss.
XX
OS      Synthetic.
XX
PN      MO9637919-A1.
XX
PD      03-SEP-1998.
XX
PF      25-FEB-1998; 98WO-US003678.
XX
PR      28-FEB-1997; 97US-0039405P.
XX
PA      (IOWA ) UNIV IOWA RES FOUNO.
XX
PI      Schwartz DA, Krieg AM;
XX
DR      WPI; 1998-480941/41.
XX
PT      Use of nucleic acids containing an unmethylated CpG - for treating a
PT      subject having or at risk of having an acute decrement in air flow or
PT      inhibiting an inflammatory response.
XX
PS      Claim 35; Page 27; 65pp; English.
XX
CC      This sequence represents an unmethylated CpG dinucleotide, and can be
CC      used in the method of the invention. The method is for treating a subject
CC      having, or at risk of having an acute decrement in air flow, comprising
CC      administering a nucleic acid sequence containing at least one
CC      unmethylated CpG. The nucleic acids containing an unmethylated CpG
CC      dinucleotide affect an immune response in a subject by activating natural
CC      killer cells (NK) or redirecting a subject's immune response from a Th2
CC      to a Th1 response by inducing monocytic and other cells to produce Th1
CC      cytokines. They can be used to treat pulmonary disorders having an
CC      immunologic component, such as asthma or environmentally induced airway
CC      disease. They can also be used to treat diseases associated with Gram-
CC      positive bacterial infections or endotoxaemia including bacterial
CC      meningitis, neonatal sepsis, cystic fibrosis, inflammatory bowel disease
CC      and liver cirrhosis, Gram-negative pneumonia, Gram-negative abdominal
CC      abscess, haemorrhagic shock, disseminated intravascular coagulation, or
CC      an inflammatory response to lipopolysaccharide
XX
SQ      Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
OY      Query Match 1.1%; Score 15.8; DB 1; Length 20;
OY      Best Local Similarity 89.5%; Pred. No. 2.7e+02;
OY      Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db      426 GCGGCTGCGGCGCGCG 444
OY      1 GCGGCGCGGCGCGCGCG 19
RESULT 116
AAV74243
ID      AAV74243 standard; DNA; 20 BP.
```

```
XX
AC      AAV74243;
XX
DT      20-MAR-2003 (revised)
DT      15-MAR-1999 (first entry)
XX
DE      CpG-N motif O-ODN 2001 DNA.
XX
KW      CpG-N motif; immunostimulation; antigen; CpG-S motif; immunisation; ODN;
KW      viral antigen; bacterial antigen; parasite; therapeutic; growth factor;
KW      toxin; tumour suppressor; cytokine; apoptotic protein; interferon;
KW      hormone; clotting factor; ligand; receptor; oligodeoxynucleotide; ss.
XX
OS      Synthetic.
XX
PN      MO9852581-A1.
XX
PD      26-NOV-1998.
XX
PF      20-MAY-1998; 98WO-US010408.
XX
PR      20-MAY-1997; 97US-0047209P.
PR      20-MAY-1997; 97US-0047233P.
XX
PA      (OTTA-) OTTAWA CIVIC HOSPITAL LOEB RES INST.
PA      (IOWA ) UNIV IOWA RES FOUNO.
XX
PI      Davis HL, Krieg AM, Schorr J, Wu T;
XX
DR      WPI; 1999-059712/05.
XX
PT      Use of neutralising CpG and stimulating CpG motifs in DNA vectors - for
PT      enhancing the immunostimulatory effect of an antigen or enhancing the
PT      expression of a therapeutic polypeptide.
XX
PS      Example 1; Page 64; 109pp; English.
XX
CC      AAV74237-V74253 are oligodeoxynucleotide (ODN) primers used to describe a
CC      method for enhancing the immunostimulatory effect of an antigen encoded
CC      by nucleic acid contained in a nucleic acid construct. The method
CC      involves determining the CpG-N and CpG-S motifs present in the construct,
CC      removing neutralising CpG (CpG-N) motifs and optionally inserting a
CC      stimulatory CpG (CpG-S) motifs in the construct, thereby producing a
CC      nucleic acid construct having enhanced immunostimulatory efficacy. The
CC      method can be used for immunisation against viral antigens, e.g. from
CC      hepatitis B virus (HBV), bacterial antigens or an antigen derived from a
CC      parasite. They can also be used for expression of a therapeutic
CC      polypeptide, e.g. growth factors, toxins, tumour suppressors, cytokines,
CC      apoptotic proteins, interferons, hormones, clotting factors, ligands and
CC      receptors. (Updated on 20-MAR-2003 to correct PA field.)
XX
SQ      Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
OY      Query Match 1.1%; Score 15.8; DB 1; Length 20;
OY      Best Local Similarity 89.5%; Pred. No. 2.7e+02;
OY      Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db      426 GCGGCTGCGGCGCGCG 444
OY      1 GCGGCGCGGCGCGCGCG 19
RESULT 117
AAZ05061
ID      AAZ05061 standard; DNA; 20 BP.
XX
AC      AAZ05061;
XX
DT      07-OCT-1999 (first entry)
XX
DE      PCR primer used to amplify an ORF of Chlamydia trachomatis.
```



KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
 KW paratrachoma; inclusion conjunctivitis; genital disease; perihemphalitis;  
 KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;  
 KW bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.  
 OS Synthetic.  
 OS Chlamydia trachomatis.  
 XX MO9928475-A2.  
 PN 10-JUN-1999.  
 PD 27-NOV-1998; 98WO-IB001939.  
 PF 28-NOV-1997; 97FR-00015041.  
 PR 17-DEC-1997; 97FR-00016034.  
 PR 04-NOV-1998; 98US-0107077P.  
 PA (GEST ) GENSET.  
 PI Griffiths R;  
 DR WPI; 1999-371125/31.  
 XX Genome sequence of Chlamydia trachomatis.  
 PT Disclosure; Page 1739; 1755pp; English.  
 XX PCR primers AA201426-206209 were used to amplify open reading frames  
 CC (ORFs) of the genome of Chlamydia trachomatis (see AA201425). These ORFs  
 CC encode polypeptides (see AA201425) which can be used as vaccines  
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
 CC be used to control growth of the microorganism. Chlamydia trachomatis is  
 CC responsible for a large number of diseases, e.g. eye diseases such as  
 CC conjunctivitis; genital diseases such as nongonococcal urethritis;  
 CC epididymitis; cervicitis; salpingitis; perihemphalitis; bartholinitis;  
 CC pneumonia; in breast feeding infants; and venereal lymphogranulomatosis.  
 CC The polypeptides of the invention may be of use in treating these  
 CC diseases  
 CC  
 SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
 XX  
 XX  
 Query Match 1.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1619 GGATGACCAATCTCTCC 1637  
 DB 1 GGATGACCAATCTCTCC 19  
 RESULT 118  
 AA202676/C  
 ID AA202676 standard; DNA; 20 BP.  
 AC AA202676;  
 XX  
 XX 07-OCT-1999 (first entry)  
 DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
 XX  
 XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
 KW paratrachoma; inclusion conjunctivitis; genital disease; perihemphalitis;  
 KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;  
 KW bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.  
 OS Synthetic.  
 OS Chlamydia trachomatis.  
 XX MO9928475-A2.  
 PN 10-JUN-1999.  
 PD 27-NOV-1998; 98WO-IB001939.  
 PF 28-NOV-1997; 97FR-00015041.  
 PR 17-DEC-1997; 97FR-00016034.  
 PR 04-NOV-1998; 98US-0107077P.  
 PA (GEST ) GENSET.  
 PI Griffiths R;  
 DR WPI; 1999-371125/31.  
 XX Genome sequence of Chlamydia trachomatis.  
 PT Disclosure; Page 1544; 1755pp; English.  
 XX PCR primers AA201426-206209 were used to amplify open reading frames  
 CC (ORFs) of the genome of Chlamydia trachomatis (see AA201425). These ORFs  
 CC encode polypeptides (see AA201425) which can be used as vaccines  
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
 CC be used to control growth of the microorganism. Chlamydia trachomatis is  
 CC responsible for a large number of diseases, e.g. eye diseases such as  
 CC conjunctivitis; genital diseases such as nongonococcal urethritis;  
 CC epididymitis; cervicitis; salpingitis; perihemphalitis; bartholinitis;  
 CC pneumonia; in breast feeding infants; and venereal lymphogranulomatosis.  
 CC The polypeptides of the invention may be of use in treating these  
 CC diseases  
 CC  
 SQ Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 XX  
 XX  
 Query Match 1.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1619 GGATGACCAATCTCTCC 1637  
 DB 20 GGATGACCAATCTCTCC 2  
 RESULT 119  
 AA13753/C  
 ID AA13753 standard; DNA; 20 BP.  
 AC AA13753;  
 XX  
 XX 27-JUL-2000 (first entry)  
 DE Stem cell factor universal oligonucleotide 220-7.  
 XX  
 XX Stem cell factor; SCF; haematopoietic progenitor cell; blood forming;  
 KW primitive progenitor cell; haematopoietic disorder; synergistic;  
 KW allogeneic; autologous bone marrow transplant; gene therapy;  
 KW transfection; haematopoietic stem cell; acute blood loss; neoplasia;  
 KW cancer; ss.  
 OS Synthetic.  
 OS EP992579-A1.  
 PN EP992579-A1.  
 XX  
 XX 12-APR-2000.  
 PD 04-OCT-1990; 99EP-00122861.  
 PF 16-OCT-1989; 89US-00422383.  
 PR 11-JUN-1990; 90US-00537198.  
 PR 24-AUG-1990; 90US-00573616.  
 PR 28-SEP-1990; 90WO-US0005548.  
 PR 01-OCT-1990; 90US-00589701.  
 PR 04-OCT-1990; 90EP-00310899.  
 XX  
 XX (AMGE-) AMGEN INC.

```
XX PI Zeebo KM, Suggs SV, BosseImann RA, Martin FH;
XX DR WPI; 2000-259135/23.
XX PT Production of hematopoietic cells suitable for administration to a
XX PT subject using progenitor cells and expanding the cells using stem cell
XX PT factor.
XX PS Example 3; Fig 12C; 123pp; English.
XX CC A method has been developed of making hematopoietic cells suitable for
XX CC administration to a subject. The method comprises: (a) obtaining the cells
XX CC hematopoietic progenitor cells from a donor; and (b) expanding the cells
XX CC by adding to the cells a hematopoietically effective dose of a
XX CC polypeptide product having at least part of the primary structural
XX CC confirmation and one or more of the biological properties of naturally
XX CC occurring stem cell factor (SCF). The method is useful for stimulating
XX CC primitive progenitor cells including early hematopoietic progenitor
XX CC cells which are capable of maturing to erythroid, megakaryocyte,
XX CC granulocyte, lymphocyte and macrophage cells. SCF results in absolute
XX CC increases in hematopoietic cells of both myeloid and lymphoid lineages.
XX CC SCF is useful for treating hematopoietic disorders. The method is useful
XX CC for expanding early hematopoietic progenitors in syngeneic, allogeneic
XX CC or autologous bone marrow transplant. SCF is useful for enhancing the
XX CC efficiency of gene therapy based on transfecting hematopoietic stem
XX CC cells. SCF is also useful for combating the myelosuppressive effects of
XX CC anti-HIV drugs such as AZT and for enhancing hematopoietic recovery
XX CC after acute blood loss and as a boost to the immune system for fighting
XX CC neoplasia (cancer). The present sequence represents a universal
XX CC oligonucleotide which is used in an example from the present invention
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
OY Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db 1519 TAAAAAAGTAAAA 1537
19 TAAAAAAGTAAAA 1
RESULT 120
AAF9116
ID AAF9116 standard; DNA; 20 BP.
XX AC AAF9116;
XX DT 12-JUN-2001 (first entry)
XX DE Immunostimulatory nucleic acid #232.
XX KW Vaccine; cytostatic; vitucidal; bactericidal; fungicidal; anti-parasitic;
XX KW immunostimulatory; tumour; viral infection; bacterial infection;
XX KW fungal infection; parasitic infection; cancer; asthma;
XX KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX OS Synthetic.
XX PN WO200122972-A2.
XX PD 05-APR-2001.
XX PF 25-SEP-2000; 2000WO-US026383.
XX PR 25-SEP-1999; 99US-0156113P.
XX PR 27-SEP-1999; 99US-0156135P.
XX PR 23-AUG-2000; 2000US-0227436P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PA (CODE-) CODEV PHARM GMBH.
```

```
PI Krieg AM, Schetter C, Volmer J;
XX DR WPI; 2001-273485/28.
XX PT Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT using immunostimulatory Py-rich and TG nucleic acids.
XX PS Claim 101; Page 43; 338pp; English.
XX CC The present invention relates to a method for stimulating an immune
XX CC response. The method comprises administering an immunostimulatory nucleic
XX CC acid to a non-rodent subject in sufficient quantity to stimulate an
XX CC immune response. The present sequence is one such immunostimulatory
XX CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX CC against tumor antigens, viral antigens (e.g. herpesviridae, retroviridae
XX CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX CC also useful for preventing cancer, asthma, infectious disease, allergy or
XX CC immune deficiency. The present sequence can also be used to redirect a
XX CC Th2 to a Th1 immune response and to activate immune cells. Note: the
XX CC present sequence may have a phosphorothioate backbone
XX SQ Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
OY Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db 426 GGCGGCTCGCGCGCGCGC 444
1 GGCGGCGCGCGCGCGCGC 19
RESULT 121
AAH41332/c
ID AAH41332 standard; DNA; 20 BP.
XX AC AAH41332;
XX DT 21-AUG-2001 (first entry)
XX DE Universal stem cell factor (SCF) related oligonucleotide SEQ ID NO:33.
XX KW Stem cell factor; SCF; stem cell factor receptor; blood cell disorder;
XX KW gene therapy; PCR primer; mutagenesis; probe; ss.
XX OS Synthetic.
XX PN US6207454-B1.
XX PD 27-MAR-2001.
XX PF 31-DEC-1998; 98US-00224681.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 25-NOV-1992; 92US-00982255.
XX PR 21-DEC-1993; 93US-00172329.
XX PR 24-MAY-1995; 95US-00449653.
XX PR 12-JAN-1998; 98US-00005893.
XX PA (AMGEN-) AMGEN INC.
XX PI Zeebo KM, BosseImann RA, Suggs SV, Martin FH;
XX DR WPI; 2001-366062/38.
XX PT Enhancing efficiency of transfer of polynucleotide into a target
XX PT mammalian cell in vitro, involves exposing cell that expresses a stem
```

PT cell factor receptor to stem cell factor, and introducing polynucleotide  
into cell in vitro.  
PS Example 3; Fig 12C; 210pp; English.  
XX  
XX  
XX The present invention describes a method for enhancing (E) the efficiency  
CC of transfer of a polynucleotide (I) into a target mammalian cell (II) in  
CC vitro, comprising exposing (II) that expresses a stem cell factor (SCF)  
CC receptor to a biologically active SCF, its analogue or fragment, which  
CC induces cell proliferation, and introducing (I) to (II) in vitro.  
CC Exposure of SCF to (II) results in increased uptake of (I) into the cell.  
CC The method is useful for enhancing the efficiency of the transfer of a  
CC polynucleotide into a target mammalian cell in vitro. The method is  
CC useful in gene therapy techniques. AAH41301 to AAH41364 and AAB98351 to  
CC AAB98390 represent sequences used in the exemplification of the present  
CC invention  
XX  
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 1519 TAAAAAAGTAAAA 1537  
Db 19 TAAAAAAGTAAAA 1  
RESULT 122  
AAS04112/C  
ID AAS04112 standard; DNA; 20 BP.  
XX  
AC AAS04112;  
XX  
DT 29-AUG-2001 (first entry)  
XX  
DE Human SCF (stem cell factor) cDNA universal PCR primer 220-7.  
XX  
XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;  
KW blood disorder; leukemia; Hodgkin's disease; lymphoma; splenomegaly;  
KW anemia; Kala azar; septicemia; malaria; hypopigmentation disorder;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX US6207417-B1.  
XX  
XX 27-MAR-2001.  
XX  
PD 07-JUN-1995; 95US-00482918.  
XX  
PF 16-OCT-1989; 89US-00422383.  
XX  
PR 11-JUN-1990; 90US-00537198.  
XX  
PR 24-AUG-1990; 90US-00573616.  
XX  
PR 01-OCT-1990; 90US-00589701.  
XX  
PR 21-DEC-1993; 93US-00172329.  
XX  
XX (ZSEB/) ZSEBO K M.  
PA (BOSS/) BOSSLMAN R A.  
XX (SUGG/) SUGGS S V.  
PA (MART/) MARTIN F H.  
XX  
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;  
PI  
DR WPI; 2001-298941/31.  
XX  
XX Novel nucleic acids encoding stem cell factor useful for treating  
PT disorders involving blood cells, e.g. leukemia, splenomegaly, Hodgkin's  
PT disease, Kala azar, anemia and septicemia.  
XX  
XX Example 3; Fig 12C; 209pp; English.  
XX  
CC The present sequence for universal PCR primer 220-7 is 1 of 8 universal

CC oligonucleotides (AAS04110-AAS04117) used in the isolation of the human  
CC SCF (stem cell factor) cDNA sequence. The present invention relates to  
CC novel stem cell factors (AAU02453-AAU02458, AAU02460, AAU02461) and the  
CC polynucleotides encoding them. SCF stimulate primitive progenitor cells  
CC including early haematopoietic progenitor cells. The invention also  
CC describes SCF peptides (AAU02462-AAU02481) and the oligonucleotides  
CC (AAS04081-AAS04117) used in the isolation of human and rat SCF sequences.  
CC The polynucleotide encoding SCF is useful for producing SCF and useful in  
CC gene therapy. It is useful for treating disorders involving blood cells  
CC such as myelofibrosis, metastatic carcinoma, acute leukemia, multiple  
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anemia,  
CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,  
CC disseminated fungus disease, fulminating septicemia, malaria, vitamin B12  
CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation  
CC disorders such as plebaldism and vitiligo  
XX  
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 1519 TAAAAAAGTAAAA 1537  
Db 19 TAAAAAAGTAAAA 1  
RESULT 123  
AAF89092/C  
ID AAF89092 standard; DNA; 20 BP.  
XX  
AC AAF89092;  
XX  
DT 13-JUN-2001 (first entry)  
XX  
DE Mammalian stem cell factor PCR primer SEQ ID NO: 33.  
XX  
XX Human; rat; mammal; stem cell factor; SCF; cell growth stimulation;  
KW gene therapy; haematopoietic disorder; aplastic anaemia; leukaemia;  
KW neurological damage; intestinal damage; infertility; AIDS; SCID;  
KW severe combined immunodeficiency; PCR primer; ss.  
XX  
XX Mammalia.  
XX  
XX US6207802-B1.  
XX  
XX 27-MAR-2001.  
XX  
PD 09-NOV-1994; 94US-00336728.  
XX  
PF 16-OCT-1989; 89US-00422383.  
XX  
PR 11-JUN-1990; 90US-00537198.  
XX  
PR 24-AUG-1990; 90US-00573616.  
XX  
PR 01-OCT-1990; 90US-00589701.  
XX  
PR 25-NOV-1992; 92US-00982255.  
XX  
XX (AMGE-) AMGEN INC.  
PA  
XX  
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;  
PI  
DR WPI; 2001-353108/37.  
XX  
XX Novel isolated non-human mammalian stem cell factor polypeptide  
PT stimulating growth of early hematopoietic progenitor cells, useful for  
PT treating aplastic anemia, lymphoma, Letterer-Siwe disease, Kala azar,  
PT sarcoidosis.  
XX  
XX Example 3; Fig 12C; 209pp; English.  
XX  
XX The present invention provides the protein and coding sequences of  
CC mammalian stem cell factors (SCFs). These are capable of stimulating the  
CC growth of early haematopoietic progenitor cells, neural stem cells and  
CC primordial germ stem cells. The sequences are useful in the treatment of

```
CC leukaemiae, haematopoietic disorders, aplastic anaemia, paroxysmal
CC nocturnal haemoglobinuria, malaria, pigmentation disorders, neurological
CC and intestinal damage, infertility, AIDS and severe combined
CC immunodeficiency (SCID). The present sequence is primer used to amplify
CC an SCF in the exemplification of the invention
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
Qy
Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1519 TAAAAAAGTAAAA 1537
Db 19 TAAAAAAGTAAAA 1
RESULT 124
AAH23890/C
ID AAH23890 standard; DNA; 20 BP.
XX
AC AAH23890;
XX
DT 07-AUG-2001 (first entry)
XX
DE Human SCF (stem cell factor) cDNA universal PCR primer 220-7.
XX
KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW anaemia; kala azar; septicemia; malaria; hypopigmentation disorder;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
PN US6204363-B1.
XX
PD 20-MAR-2001.
XX
PF 25-NOV-1992; 92US-00982255.
XX
PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
XX
PA (AMGE-) AMGEN INC.
XX
PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX
DR WPI; 2001-256683/26.
XX
PT New stem cell factor polypeptides and their analogs which stimulate
PT growth of early hematopoietic progenitors, useful for treating aplastic
PT anemia, carcinoma, multiple myeloma, vitiligo, kala azar, Hodgkin's
PT disease.
XX
PS Example 3; Fig 12C; 166pp; English.
XX
CC The present sequence for universal PCR primer 220-7 is 1 of 8 universal
CC oligonucleotides (AAH23888-AAH23895) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAB73561-AAB73568, AAB73571-AAB73576) and the
CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
CC including early haematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAB73578-AAB73597) and the oligonucleotides
CC (AAH23859-AAH23887) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCF and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin
```

```
CC B12 and folic acid deficiency, pyridoxine deficiency, and
CC hypopigmentation disorders such as piebaldism and vitiligo
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
Qy
Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1519 TAAAAAAGTAAAA 1537
Db 19 TAAAAAAGTAAAA 1
RESULT 125
AAH43689
ID AAH43689 standard; DNA; 20 BP.
XX
AC AAH43689;
XX
DT 21-JAN-2002 (first entry)
XX
DE PRKAG3 reverse primer hRNL.
XX
KW Human; AMP-activated protein kinase gamma 3 subunit; PRKAG3; variant;
KW metabolic disease; diabetes; obesity; substitution; PCR; primer; amplify;
KW polymerase chain reaction; ss.
XX
OS Synthetic.
XX
PN WO200177305-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-SE000765.
XX
PR 07-APR-2000; 2000US-0195665P.
XX
PA (AREX-) AREXIS AB.
XX
PI Andersson L, Luthman H, Marklund S;
XX
DR WPI; 2001-657170/75.
XX
PT New variants of human AMP-activated protein kinase gamma3 subunit
PT associated with a metabolic disease e.g. diabetes or obesity and method
PT for determining a risk estimate of diseases in subject by detecting the
PT variant.
XX
PS Example 1; Page 14; 25pp; English.
XX
CC The sequences given in AAH43686-93 are primers which were used in the
CC amplification and isolation of the full length cDNA encoding the human
CC AMP-activated protein kinase gamma 3 subunit (PRKAG3). Detecting the
CC presence of the PRKAG3 DNA, or a variant, is useful in determining a risk
CC estimate of a metabolic disease, such as diabetes or obesity, in a
CC subject. The variation may occur in exons 3, 4 or 10. In exon 3 variation
CC may be a substitution of a G for a C at nucleotide 320, resulting in the
CC amino acid substitution P71A; in exon 4 variation may be a substitution
CC of a T for a C at nucleotide 550; and in exon 10 variation may be a
CC substitution of a T for a C at nucleotide 1037, resulting in the amino
CC acid substitution R340W. There may also be nucleotide variation in intron
CC 6. The numbering of these variations is based on the full length cDNA,
CC rather than on position 1 of the open reading frame. This primer sequence
CC binds in intron 4
XX
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;
Qy
Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 423 AGTGCGGCTGGCGCGCG 441
```

Db 1 AGTGGCGGCTGCAGACCCG 19

RESULT 126  
ID AAS04213/C standard; DNA; 20 BP.

XX AAS04213;

XX 29-AUG-2001 (first entry)

DE Human SCF (stem cell factor) cDNA universal PCR primer 220-7.

XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;  
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;  
KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;  
KW PCR primer; ss.

XX Homo sapiens.

XX US6218148-B1.

XX 17-APR-2001.

XX 21-DEC-1993; 93US-00172329.

XX 16-OCT-1989; 89US-00422383.

XX 11-JUN-1990; 90US-00537198.

XX 24-AUG-1990; 90US-00573616.

XX 01-OCT-1990; 90US-00589701.

XX 25-NOV-1992; 92US-00982255.

XX (AMGE-) AMGEN INC.

XX Zeebo KM, Besselman RA, Suggs SV, Martin FH;

XX WPI; 2001-281051/29.

XX Example 3; Fig 12C; 167pp; English.

CC The present sequence for universal PCR primer 220-7 is 1 of 8 universal  
CC oligonucleotides (AAS04211-AAS04218) used in the isolation of the human  
CC SCF (stem cell factor) cDNA sequence. The present invention relates to  
CC novel stem cell factors (AAU02761-AAU02767, AAU02775, AAU02797)  
CC and the polynucleotides encoding them. SCF stimulate primitive progenitor  
CC cells including early haematopoietic progenitor cells. The invention also  
CC describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides  
CC (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.  
CC The polynucleotide encoding SCF is useful for producing SCF and useful in  
CC gene therapy. It is useful for treating disorders involving blood cells  
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple  
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,  
CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,  
CC disseminated fungus disease, fulminating septicemia, malaria, vitamin B12  
CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation  
CC disorders such as piebaldism and vitiligo

XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAGTAAAA 1537  
DB 19 TAAAAAAGTAAAA 1

RESULT 127

AAS10448/C  
ID AAS10448 standard; DNA; 20 BP.

XX AAS10448;

XX 24-OCT-2001 (first entry)

DE Human stem cell factor (SCF) cDNA universal PCR primer 220-7.

XX Human; stem cell factor; SCF; haematopoietic progenitor cell;  
KW blood disorder; Hodgkin's disease; vitamin B12; folic acid deficiency;  
KW hypopigmentation disorder; viral disorder; AIDS; PCR primer; ss.

XX Homo sapiens.

XX US6248319-B1.

XX 19-JUN-2001.

XX 24-MAY-1995; 95US-00449653.

XX 16-OCT-1989; 89US-00422383.

XX 11-JUN-1990; 90US-00537198.

XX 24-AUG-1990; 90US-00573616.

XX 01-OCT-1990; 90US-00589701.

XX 10-APR-1991; 91US-00684535.

XX 25-NOV-1992; 92US-00982255.

XX 21-DEC-1993; 93US-00172329.

XX (ZSEB/) ZSEBO K M.

XX (BOSS/) BOSELMAN R A.

XX (SUGS/) SUGGS S V.

XX (MART/) MARTIN F H.

XX Zeebo KM, Besselman RA, Suggs SV, Martin FH;

XX WPI; 2001-407312/43.

XX Example 3; Fig 12C; 210pp; English.

CC The present sequence for universal PCR primer 220-7 is 1 of 19 PCR  
CC primers (AAS10435-AAS10453) used to amplify various portions of the human  
CC SCF cDNA sequence. The sequence is described in an invention relating to  
CC novel stem cell factors, the polynucleotides encoding them and methods  
CC for producing the stem cell factors. The methods involve increasing the  
CC number of early haematopoietic progenitor cells in human peripheral blood  
CC by administering a haematopoietically effective human stem cell factor  
CC polypeptide. The methods are useful for the treatment of blood disorders,  
CC including myelofibrosis, myelocytosis, osteopetrosis, metastatic  
CC carcinoma, acute leukaemia, multiple myeloma, Hodgkin's disease,  
CC lymphoma, Gaucher's disease, Niemann-Pick disease, refractory anaemia,  
CC malaria, vitamin B12 and folic acid deficiency, hypopigmentation  
CC disorders i.e. piebaldism and viral induced disorders, including AIDS

XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAGTAAAA 1537  
DB 19 TAAAAAAGTAAAA 1

RESULT 128  
ABS77759  
ID ABS77759 standard; DNA; 20 BP.

```
AC ABS77759;
XX
XX 13-DEC-2002 (first entry)
XX
DE Angiogenesis inhibitor oligonucleotide #243.
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX rubecosis; Osler-Weber Syndrome; myocardial angiogenesis;
XX plaque neovascularisation; telangiectasia; haemophilic joint;
XX angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
XX scleroderma; hypertrophic scar.
XX
XX Synthetic.
XX
XX WO200253141-A2.
XX
XX 11-JUL-2002.
XX
XX 14-DEC-2001; 2001WO-US048458.
XX
XX 14-DEC-2000; 2000US-0255534P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX
XX Bratzler RL;
XX
XX WPI; 2002-566690/60.
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX antiangiogenic nucleic acid molecule to the subject.
XX
XX Claim 2; Page 23; 276pp; English.
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubecosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
XX neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX acid of the invention
XX
SQ Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 426 GCGCGCTGCGCGCGCGCG 444
DB 1 GCGCGCGCGCGCGCGCGCG 19
XX
RESULT 129
ABL39008
ID ABL39008 standard; DNA; 20 BP.
XX
XX ABL39008;
XX
XX 16-APR-2002 (first entry)
XX
DE Immunostimulatory nucleic acid SEQ ID NO: 410.
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
```

```
KW angiogenesis; metastasis; cytostatic; ss.
XX
XX Synthetic.
XX
XX WO200197843-A2.
XX
XX 27-DEC-2001.
XX
XX 22-JUN-2001; 2001WO-US020154.
XX
XX 22-JUN-2000; 2000US-0213346P.
XX
XX (IOMA ) UNIV IOMA RES FOUND.
XX
XX Weiner G, Hartmann G;
XX
XX WPI; 2002-154611/20.
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
XX administering immunostimulatory nucleic acids that induce expression of
XX cell surface antigens and antibodies to a subject having or at risk of
XX developing cancer.
XX
XX Disclosure; Page 199; 312pp; English.
XX
XX The present invention relates to methods for treating or preventing
XX cancer, involving administering to a subject having or at risk of
XX developing cancer immunostimulatory nucleic acids that induce expression
XX of cell surface antigens and antibodies. The methods are useful for
XX treating or preventing cancer such as basal cell carcinoma, bladder
XX cancer, bone cancer, brain and central nervous system (CNS) cancer,
XX breast cancer, cervical cancer, colon and rectum cancer, connective
XX tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
XX cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
XX Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
XX cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
XX cancer, stomach cancer, testicular cancer, and uterine cancer. The
XX present sequence is an immunostimulatory oligonucleotide described in the
XX exemplification of the invention
XX
SQ Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 426 GCGCGCTGCGCGCGCGCG 444
DB 1 GCGCGCGCGCGCGCGCGCG 19
XX
RESULT 130
AAD35465/C
ID AAD35465 standard; DNA; 20 BP.
XX
XX AAD35465;
XX
XX 25-JUL-2002 (first entry)
XX
XX Rat SCF 5' cDNA amplifying PCR primer, 220-7.
XX
XX Rat: stem cell factor; SCF protein; leucopenia; thrombocytopaenia;
XX anaemia; myelosuppression; nerve damage; myeloproliferative disorder;
XX infertility; neoplasia; myelofibrosis; osteoporosis;
XX metastatic carcinoma; acute leukemia; multiple myeloma; sarcoidosis;
XX Hodgkin's disease; lymphoma; Gaucher's disease; Niemann-Pick disease;
XX Langerer-Siwe disease; refractory erythroidlastic anaemia; Kala azar;
XX Di Guglielmo syndrome; congestive splenomegaly; splenic pancytopenia;
XX disseminated fungus disease; Fulminating septicemia; piebaldism; AIDS;
XX acquired immune deficiency syndrome; malaria; military tuberculosis;
XX pyridoxine deficiency; vitamin B12 deficiency; folic acid deficiency;
XX Diamond Blackfan anaemia; hypopigmentation disorder; vitiligo; PCR;
XX primer; ss.
```

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XX Rattus sp.
OS
XX
XX US2002018763-A1.
XX
XX 14-FEB-2002.
XX
XX 12-JAN-1998; 98US-00005243.
XX
XX 24-MAY-1995; 95US-00449653.
XX
XX (ZSEB/) ZSEBO K M.
XX (BOSS/) BOSSSELMAN R A.
XX (SUGS/) SUGS S V.
XX (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Sugs SV, Martin FH;
XX
XX WPI, 2002-350789/38.
XX
XX Novel non-naturally-occurring stem cell factor polypeptide, useful for
XX treating leucopenia, thrombocytopenia, anemia and for enhancing
XX engraftment of bone marrow during transplantation in a mammal.
XX
XX Example 3; Fig 12C; 217pp; English.
XX
XX The present invention relates to novel non-naturally-occurring stem cell
XX factor (SCF) polypeptides having an amino acid sequence sufficiently
XX duplicative of that of naturally-occurring SCF to allow possession of
XX haematopoietic biological activity of naturally occurring SCF. Sequences
XX of the invention are useful for treating leucopenia, thrombocytopenia,
XX anemia and for enhancing bone marrow recovery in treatment of radiation,
XX engraftment of bone marrow during transplantation in mammals and chemical
XX or chemotherapeutic induced bone marrow aplasia or myelosuppression. They
XX are also useful for treating acquired immune deficiency in a human, nerve
XX damage, neoplasia, infertility, myeloproliferative disorder, intestinal
XX damage in a mammal. SCF sequences are useful for preparing biologically
XX active polymer polypeptide adduct, for enhancing transfection of early
XX haematopoietic progenitor cells with a gene, and transfer of a gene into
XX a mammal. They are useful for treating myelofibrosis, myelocytosis,
XX osteoporosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
XX Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,
XX leucocyte-slow disease, refractory erythroidleukemia, Di Guglielmo
XX syndrome, congestive splenomegaly, Kala azar, sarcoidosis, primary
XX splenic pancytopenia, disseminated fungus disease, malaria, military
XX tuberculosis, fulminating septicemia, pyridoxine deficiency, vitamin B12
XX and folic acid deficiency, Diamond Blackfan anemia, hypopigmentation
XX disorders such as piebaldism, AIDS (acquired immune deficiency syndrome)
XX and vitiligo. The present sequence is a PCR primer which is used for
XX amplifying the 5' end of rat SCF cDNA. This sequence is used in the
XX exemplification of the invention
XX
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 2.7e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1519 TAAAAAAGTAAAA 1537
XX |||||
XX 19 TAAAAAAGTAAAA 1
XX
XX RESULT 131
XX ABS73849/C
XX ID ABS73849 standard; DNA; 20 BP.
XX
XX AC ABS73849;
XX
XX 05-DEC-2002 (first entry)
XX
XX SCF universal oligonucleotide 220-7.
XX

```

```

XX Stem cell factor; SCF; blood-forming system; blood cell disorder;
XX haematopoietic system; metastatic carcinoma; acute leukaemia;
XX multiple myeloma; Hodgkin's disease; lymphoma; malaria; vitiligo;
XX refractory erythroidleukemia; acute leukaemia, multiple myeloma,
XX disseminated fungus disease; haematopoietic; tuberculous;
XX antineoplastic; antifungal; antimetastatic; dermatological; ss.
XX
XX Synthetic.
XX
XX EP1241258-A2.
XX
XX 18-SEP-2002.
XX
XX 04-OCT-1990; 2002EP-00008587.
XX
XX 16-OCT-1989; 89US-00422383.
XX 11-0UN-1990; 90US-00537198.
XX 24-AUG-1990; 90US-00573616.
XX 28-SEP-1990; 90MO-US005548.
XX 01-OCT-1990; 90US-00589701.
XX 04-OCT-1990; 90EP-00310899.
XX 04-OCT-1990; 95EP-00105391.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zsebo KM, Bosselman RA, Martin FH;
XX
XX WPI, 2002-684093/74.
XX
XX Production of a human stem cell factor (SCF) polypeptide for treating
XX disorders involving blood cells, such as leukemia, comprises culturing
XX mammalian cells comprising non-human SCF promoter DNA linked to DNA
XX encoding the human SCF.
XX
XX Example 3; Fig 12C; 120pp; English.
XX
XX The present invention relates to novel stem cell factors (SCFs),
XX polynucleotide sequences encoding the SCFs, and methods of producing
XX them. SCFs are involved in the blood-forming (haematopoietic) system in
XX mammals, particularly humans. The method of the invention is useful for
XX the production of human SCF. The stem cell factors are useful to treat
XX disorders involving blood cells e.g. metastatic carcinoma, acute
XX leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, refractory
XX erythroidleukemia, acute leukaemia, multiple myeloma, refractory
XX disease, malaria, and vitiligo. The present sequence representing a
XX universal oligonucleotide for SCF DNA is used in the examples of the
XX present invention
XX
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 2.7e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1519 TAAAAAAGTAAAA 1537
XX |||||
XX 19 TAAAAAAGTAAAA 1
XX
XX RESULT 132
XX ABR72022/C
XX ID ABR72022 standard; DNA; 20 BP.
XX
XX AC ABR72022;
XX
XX 30-JUL-2002 (first entry)
XX
XX Human MTG16 gene, intron splice site #6.
XX
XX Human; MTG16; tumour suppressor gene; 5'-aza-2'-deoxycytidine; skin;
XX cancer; DNA methylation; adenocarcinoma; leukaemia; lymphoma; melanoma;
XX myeloma; sarcoma; teratocarcinoma; breast; prostate; liver; ovary;
XX head and neck cancer; neuroectoderm; placenta; skeletal muscle; tonsil;
XX

```

KW lymph tissue; kidney; colon; uterus; testis; stomach; adrenal gland;  
KW bladder; bone; bone marrow; gall bladder; ganglia; salivary gland;  
KW gastrointestinal tract; parathyroid; penis; salivary gland; spleen;  
KW synovial membrane; thymus; thyroid gland; PCR; primer; ss.  
OS Homo sapiens.  
XX WO200218592-A1.  
XX 07-MAR-2002.  
XX 31-AUG-2001; 2001WO-AU001097.  
XX 01-SEP-2000; 2000AU-00009806.  
XX (BION-1) BIONOMICS LTD.  
XX Callen DF, Whitmore SA, Kremmidiotis G, Kochetkova M, Crawford J;  
XX WPI; 2002-382966/41.  
XX Tumor suppressor gene which encodes polypeptide MTG16 active in  
PT suppressing cellular function associated with cancer, useful for  
PT manufacturing a medicament for treating cancer e.g. adenocarcinoma,  
PT leukemia.  
XX Example 6; Page 66; 125pp; English.  
XX The invention relates to a novel tumour suppressor gene (I) MTG16a or  
XX MTG16b and encoded polypeptide (II). (I) and (II), or a compound that  
XX mimics MTG16 actively such as 5-aza-2'-deoxycytidine, are useful for  
XX manufacturing a medicament for treating cancer, where it reverses DNA  
XX methylation. The cancer is adenocarcinoma, leukaemia, lymphoma, melanoma,  
XX myeloma, sarcoma, teratocarcinoma, and especially cancer of the breast,  
XX prostate, liver, ovary, head and neck, neuroectoderm, placenta, skeletal  
XX muscle, consti, lymph tissue, kidney, colon, uterus, testis, stomach,  
XX adrenal gland, bladder, bone, bone marrow, gall bladder, ganglia,  
XX gastrointestinal tract, parathyroid, penis, salivary glands, skin, spleen  
XX synovial membrane, thymus and thyroid gland. (I) and (II) are useful for  
XX diagnosis of a cancer, or predisposition to cancer, by establishing a  
XX profile for normal expression of MTG16 in unaffected subjects using  
XX primers derived from (I). MTG16 is further useful for identifying  
XX interacting protein suitable as drug targets, where MTG16 is fused to a  
XX DNA binding domain and used as the bait in a yeast two-hybrid system.  
XX ABK71964-ABK72041 represent human MTG16 coding sequences and PCR primers  
XX of the invention  
SQ Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1310 TTTTATTTTCAGACAGACA 1328  
DB 20 TTTTACTTACAGACAGACA 2  
RESULT 133  
ACD99549  
ID ACD99549 standard; DNA; 20 BP.  
XX ACD99549;  
XX 25-SEP-2003 (first entry)  
XX Immunostimulatory nucleic acid #235.  
XX DE  
XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX

OS Synthetic.  
XX US2003050268-A1.  
XX 13-MAR-2003.  
XX 29-MAR-2002; 2002US-00112653.  
XX 29-MAR-2001; 2001US-0279642P.  
XX (KRIE/) KRIEG A M.  
XX (BERG/) BERG D J.  
XX Krieg AM, Berg DJ;  
XX WPI; 2003-521815/49.  
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX Disclosure; Page 15; 229pp; English.  
XX The invention describes a method of treating non-allergic inflammatory  
XX disease comprising administering to a subject having or at risk of  
XX developing a non-allergic inflammatory disease an immunostimulatory  
XX nucleic acid for prevention or treatment of the disease. The method is  
XX useful for treating non-allergic inflammatory diseases, such as  
XX psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
XX inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
XX This sequence represents an immunostimulatory nucleic acid  
SQ Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 426 GGCGGCTGCGGCGCGGCG 444  
DB 1 GGCGGCGGCGGCGGCGGCG 19  
RESULT 134  
ADB36618  
ID ADB36618 standard; DNA; 20 BP.  
XX ADB36618;  
XX 04-DEC-2003 (first entry)  
XX Immunostimulatory nucleic acid #232.  
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KW hypo-responsive subject; immunostimulatory.  
XX Synthetic.  
XX US2003087848-A1.  
XX 08-MAY-2003.  
XX 02-FEB-2001; 2001US-00776479.  
XX 03-FEB-2000; 2000US-0179991P.  
XX (BRAT/) BRATZLER R L.  
XX (PETE/) PETERSEN D M.  
XX (FOUR/) FOURON Y.  
XX Bratzler RL, Petersen DM, Fouron Y;  
XX WPI; 2003-657977/62.  
XX



XX Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
XX Disclosure, Page 8; 21pp; English.  
XX  
XX The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
SQ Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 426 GCGGCTGCGCGCGCGCG 444  
Db 1 GCGGCGCGCGCGCGCGCG 19  
RESULT 135  
ADES2461/c  
ID ADE52461 standard; DNA; 20 BP.  
XX  
XX ADE52461;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
XX Stem cell factor (SCF) related DNA #32.  
XX  
XX Stem cell factor; SCF; haematopoietic activity; infertility;  
KW intestinal damage; myeloproliferative disorder; leucopenia;  
KW thrombocytopenia; anaemia; bone marrow transplant; immune deficiency;  
KW neoplasia; nerve damage; osteoporosis; metastatic carcinoma; leukaemia;  
KW military tuberculosis; haematopoietic progenitor cell; ss.  
XX  
OS Synthetic.  
XX  
PN US2002031491-A1.  
XX  
PD 14-MAR-2002.  
XX  
XX 31-DEC-1998; 98US-00224683.  
XX  
PR 16-OCT-1989; 89US-00422383.  
PR 11-JUN-1990; 90US-00537198.  
PR 24-AUG-1990; 90US-00573616.  
PR 01-OCT-1990; 90US-00589701.  
PR 10-APR-1991; 91US-00684535.  
PR 25-NOV-1992; 92US-00982255.  
PR 21-DEC-1993; 93US-00172329.  
PR 24-MAY-1995; 95US-00448653.  
PR 12-JAN-1998; 98US-00005893.  
XX  
XX (ZSEB/) ZSEBO K M.  
PA (BOSS/) BOSSMAN R A.  
PA (SUGS/) SUGS S V.  
PA (MART/) MARTIN F H.  
XX  
XX Zeebo KM, Bosseelman RA, Sugas SV, Martin FH;  
PI MPI; 2003-851459/79.  
XX  
XX New non-natural stem cell factor, useful for treating e.g. leucopenia or  
PT immune deficiency, also related nucleic acid and antibodies.  
XX  
XX Disclosure; SEQ ID NO 33; 21pp; English.  
XX  
XX The invention relates to stem cell factor (SCF) polypeptides with

CC haematopoietic activity and the polynucleotides encoding them. The  
CC polypeptides are used for treating infertility, intestinal damage,  
CC myeloproliferative disorders, leucopenia, thrombocytopenia or anaemia,  
CC for improving engraftment of bone marrow transplants, for enhancing bone  
CC marrow recovery after radiotherapy or chemotherapy and in treatment of  
CC immune deficiency, neoplasia, nerve damage, osteoporosis, metastatic  
CC carcinoma, leukaemia and military tuberculosis. The SCF polypeptides are  
CC also used to expand haematopoietic progenitor cells for transplantation  
CC and to prepare such cells for transfection with a gene. The SCF  
CC polynucleotides can be used for recombinant expression of the  
CC polypeptides and also as probes for mapping of the SCF gene, for  
CC identifying SCF-related diseases and as a marker for neighbouring genes.  
CC Antibodies raised against the polypeptides are useful in diagnosis and to  
CC remove SCF from blood. This sequence represents SCF related DNA of the  
CC invention.  
XX  
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1519 TAAAAAAGTAAAA 1537  
Db 19 TAAAAAAGTAAAAA 1  
RESULT 136  
AB291586  
ID AB291586 standard; DNA; 20 BP.  
XX  
XX AB291586;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
XX Human oligonucleotide sequence.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
XX  
XX WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002MO-US013135.  
XX  
XX 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPG-) EPIGENESIS PHARM INC.  
XX  
XX Nyce JM, Li Y, Sandrasegara A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
PI MPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX Disclosure; SEQ ID NO 6828; 872pp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

Sequence 20 BP; 11 A; 1 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1509 TACTGTAAATTAATAA 1527  
Db 2 TACTGTAAATTAATAA 20

RESULT 137  
AB285534  
ID AB285534 standard; DNA; 20 BP.  
XX  
AC AB285534;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 776; 872pp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAG 1538  
Db 2 AAAAAAAAAAGTAAAG 20

RESULT 138  
AB288880  
ID AB288880 standard; DNA; 20 BP.  
XX  
AC AB288880;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 4122; 872pp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP, 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;

SO

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAAAAGTAAAA 1537  
Db 1 TAAAAAAAAAAAAAAAAA 19

RESULT 139  
ABZ89179  
ID ABZ89179 standard; DNA; 20 BP.  
XX  
AC ABZ89179;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JM, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAe, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 4421; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP, 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;

SO

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAAAAGTAAAA 1537  
Db 1 TAAAAAAAAAAAAAAAAA 19

RESULT 140  
ABZ87176  
ID ABZ87176 standard; DNA; 20 BP.  
XX  
AC ABZ87176;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JM, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAe, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 2418; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
CC XX

SO Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 337 AGGAGCTCCTGGCGGCC 355  
DB 1 AGGAACCTCTGGCGGCC 19  
|||||

RESULT 141  
AB289702  
ID AB289702 standard; DNA; 20 BP.  
XX  
XX AB289702;  
XX  
XX 17-OCT-2003 (first entry)  
XX  
XX Human oligonucleotide sequence.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
XX  
XX OS  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013135.  
XX  
XX 24-APR-2001; 2001US-0286137P.  
XX  
XX (EP1G-) EPIGENESIS PHARM INC.  
XX  
XX Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX PI Miller S, Tang L, Shahabuddin S;  
XX DR WPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
XX respiration, has oligo(s) antisense to specific gene(s) or its  
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
XX ubiquinone.  
XX  
XX Discloure; SEQ ID NO 4944; 872bp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisense to the  
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,  
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
XX junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
CC XX

SO Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1512 TGTATATTAATAAAAAAAAA 1530  
DB 2 TGTATATTTTAAAAAAAA 20  
|||||

RESULT 142  
AB289873  
ID AB289873 standard; DNA; 20 BP.  
XX  
XX AB289873;  
XX  
XX 17-OCT-2003 (first entry)  
XX  
XX Human oligonucleotide sequence.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
XX  
XX OS  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013135.  
XX  
XX 24-APR-2001; 2001US-0286137P.  
XX  
XX (EP1G-) EPIGENESIS PHARM INC.  
XX  
XX Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX PI Miller S, Tang L, Shahabuddin S;  
XX DR WPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
XX respiration, has oligo(s) antisense to specific gene(s) or its  
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
XX ubiquinone.  
XX  
XX Discloure; SEQ ID NO 5115; 872bp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisense to the  
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,  
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
XX junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiaesthetic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antiense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 16 A; 0 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAG 1538  
DB 2 AAAAAAAAAAGAAAGAG 20

RESULT 143  
ABZ88694  
ID ABZ88694 standard; DNA; 20 BP.  
XX  
XX ABZ88694;  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.

XX  
KW Human; antiense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiaesthetic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antiense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasegna A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antiense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX  
PS Disclosure; SEQ ID NO 3936; 872pp; English.

XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antiense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiaesthetic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antiense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 17 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1518 TTAATAAAAAAAAAAGTAAA 1536  
DB 2 TTAATAAAAAAAAAAAAAA 20

RESULT 144  
ABZ89240  
ID ABZ89240 standard; DNA; 20 BP.  
XX  
XX ABZ89240;  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.

XX  
KW Human; antiense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiaesthetic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antiense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasegna A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antiense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX  
PS Disclosure; SEQ ID NO 4482; 872pp; English.

XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antiense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antitense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 18 A; 1 C; 0 G; 1 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1519 TAAAAAAGTAAAA 1537  
Db 2 TAAAAAAGTAAAA 20  
RESULT 145  
ABD23406  
ID ABD23406 standard; DNA; 20 BP.  
XX  
AC ABD23406;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE Human myosin X-derived oligonucleotide SEQ ID 2418.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.  
XX  
FN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 2418; 763bp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC inflammation, allergies and/or bronchoconstriction and/or lung  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 337 AGGAGCTCTGCGCGCCC 355  
Db 1 AGGAATCTCTGCGCGCCC 19  
RESULT 146  
ABD25470  
ID ABD25470 standard; DNA; 20 BP.  
XX  
AC ABD25470;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE A1041212-derived oligonucleotide SEQ ID 4482.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.  
XX  
FN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX

DR WPI: 2003-093058/08.  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
XX  
PS Claim 15; SEQ ID NO 4482; 763pp; English.  
XX  
XX This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
XX  
SQ Sequence 20 BP; 18 A; 1 C; 0 G; 1 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1519 TAAAAAAAAAAGTAAAA 1537  
DB 2 TAAAAAAAAAAGTAAAA 20  
RESULT 147  
ABD21764  
ID ABD21764 standard; DNA; 20 BP.  
XX  
XX ABD21764;  
AC  
XX 29-JUL-2004 (first entry)  
DT  
XX  
XX Human etanlocalcin-derived oligo SEQ ID 776.  
DE  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KM respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KM surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KM analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KM respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KM pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200285309-A2.  
PN

XX  
XX 31-OCT-2002.  
PD  
XX  
XX 23-APR-2002; 2002WO-US013143.  
PF  
XX  
XX 24-APR-2001; 2001US-0286036P.  
PR  
XX  
XX (EPIC-) EPIDENESIS PHARM INC.  
PA  
XX  
XX Nye JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
PI  
XX  
XX WPI: 2003-093058/08.  
XX  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
XX  
PS Claim 15; SEQ ID NO 776; 763pp; English.  
XX  
XX This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
XX  
SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAAGTAAAG 1538  
DB 2 AAAAAAAAAAAGTAAAG 20  
RESULT 148  
ABD25409  
ID ABD25409 standard; DNA; 20 BP.  
XX  
XX ABD25409;  
AC  
XX 29-JUL-2004 (first entry)  
DT  
XX  
XX A1122807-derived oligonucleotide SEQ ID 4421.  
DE  
XX

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

XX  
XX Homo sapiens.  
OS  
XX WO200285309-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013143.  
XX  
XX 24-APR-2001; 2001US-0286036P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
XX  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-093058/08.  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
XX oligonucleotide containing less percentage of adenosine, targeted to  
XX nucleic acids associated with lung airway or lung dysfunction, and  
XX bronchodilating agent.  
XX  
XX Claim 15; SEQ ID NO 4421; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has anti-allergic, anti-inflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it

XX  
XX Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;  
SQ

Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAAAAAGTAAA 1537  
DB 1 TAAAAAAAAAAAAAAAAA 19

RESULT 149  
ABD25110  
ID ABD25110 standard; DNA; 20 BP.  
XX  
XX ABD25110;  
XX  
XX 29-JUN-2004 (first entry)  
XX  
XX  
XX  
XX A1125228-derived oligonucleotide SEQ ID 4122.  
XX  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
OS  
XX WO200285309-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013143.  
XX  
XX 24-APR-2001; 2001US-0286036P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
XX  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-093058/08.  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
XX oligonucleotide containing less percentage of adenosine, targeted to  
XX nucleic acids associated with lung airway or lung dysfunction, and  
XX bronchodilating agent.  
XX  
XX Claim 15; SEQ ID NO 4122; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has anti-allergic, anti-inflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system



CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1519 TAAAAAAGTAAAA 1537  
DB 1 TAAAAAAGTAAAA 19  
RESULT 150  
ABD27816  
ID ABD27816 standard; DNA; 20 BP.  
XX  
AC ABD27816;  
XX  
XX 29-JUL-2004 (first entry)  
DT  
DE AA102454-derived oligonucleotide SEQ ID 6828.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
XX  
XX WO200285309-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013143.  
XX  
XX 24-APR-2001; 2001US-0286036P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
PA  
PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-093058/08.  
DR  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
XX Claim 15; SEQ ID NO 6828; 763pp; English.  
PS  
XX  
XX This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity. Levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 11 A; 1 C; 2 G; 6 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1509 TACTGTAAATAAAAA 1527  
DB 2 TACTGTAAATAAAAA 20  
RESULT 151  
ABD26103  
ID ABD26103 standard; DNA; 20 BP.  
XX  
XX ABD26103;  
XX  
XX 29-JUL-2004 (first entry)  
DT  
DE AA463249-derived oligonucleotide SEQ ID 5115.  
XX  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
XX  
XX WO200285309-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013143.  
XX  
XX 24-APR-2001; 2001US-0286036P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
PA  
PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-093058/08.  
DR  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
XX Claim 15; SEQ ID NO 5115; 763pp; English.  
PS  
XX  
XX This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity. Levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lung.  
CC Pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to  
CC prevent any unwanted effects due to it

XX SQ Sequence 20 BP; 16 A; 0 C; 4 G; 0 T; 0 U; 0 Other;

XX Query Match 1.1%; Score 15.8; DB 1; Length 20;

XX Best Local Similarity 89.5%; Pred. No. 2.7e+02;

XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAAG 1538

DB 2 AAAAAAAAAAGAAAG 20

RESULT 152

ADH67348/C

XX ID ADH67348 standard; DNA; 20 BP.

XX AC ADH67348;

XX DT 25-MAR-2004 (first entry)

XX DE Human glucocorticoid receptor-specific antisense oligonucleotide #4182.

XX KW antisense oligonucleotide; glucocorticoid receptor; infection;

XX KW inflammation; tumour formation; diabetes; obesity;

XX KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;

XX KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX OS Homo sapiens.

XX PN WO2003099215-A2.

XX PD 04-DEC-2003.

XX PF 20-MAY-2003; 2003WO-US016084.

XX PR 20-MAY-2002; 2002US-0381857P.

XX PA (PHAA ) PHARMACIA CORP.

XX PI Crosby SD, Nalaeeth AE;

XX DR WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding  
PT mammalian glucocorticoid receptor; useful for treating diabetes, obesity,  
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.

PS Claim 4; SEQ ID NO 4182; 985pp; English.

XX The invention comprises an antisense oligonucleotides that are targeted  
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The  
CC antisense oligonucleotides of the invention are useful for preventing or  
CC delaying infection, inflammation or tumour formation. The antisense  
CC oligonucleotides are also useful for treating diabetes, obesity, The  
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The  
CC present DNA sequence represents an antisense oligonucleotide that targets  
CC the human glucocorticoid receptor gene. NOTE: The present sequence  
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

XX Query Match 1.1%; Score 15.8; DB 1; Length 20;

XX Best Local Similarity 89.5%; Pred. No. 2.7e+02;

XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAAG 1538

DB 19 AAAAAAAAAAAAAAAAAAG 1

RESULT 153

ADH67401/C

XX ID ADH67401 standard; DNA; 20 BP.

XX AC ADH67401;

XX DT 25-MAR-2004 (first entry)

XX DE Human glucocorticoid receptor-specific antisense oligonucleotide #4235.

XX KW antisense oligonucleotide; glucocorticoid receptor; infection;

XX KW inflammation; tumour formation; diabetes; obesity;

XX KW cardiovascular disorder; hyperlipidemia; Cushing's syndrome; human; ss;

XX KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX OS Homo sapiens.

XX PN WO2003099215-A2.

XX PD 04-DEC-2003.

XX PF 20-MAY-2003; 2003WO-US016084.

XX PR 20-MAY-2002; 2002US-0381857P.

XX PA (PHAA ) PHARMACIA CORP.

XX PI Crosby SD, Nalaeeth AE;

XX DR WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding  
PT mammalian glucocorticoid receptor; useful for treating diabetes, obesity,  
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.  
XX Claim 4; SEQ ID NO 4235; 985pp; English.

XX The invention comprises an antisense oligonucleotides that are targeted  
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The  
CC antisense oligonucleotides of the invention are useful for preventing or  
CC delaying infection, inflammation or tumour formation. The antisense  
CC oligonucleotides are also useful for treating diabetes, obesity, The  
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The  
CC present DNA sequence represents an antisense oligonucleotide that targets  
CC the human glucocorticoid receptor gene. NOTE: The present sequence  
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

XX Query Match 1.1%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAG 1538  
DB 20 AAAAAAAAAAAAAAAAAAG 2

## RESULT 154

ADK74414/C  
ID ADK74414 standard; DNA; 20 BP.

AC ADK74414;

DT 20-MAY-2004 (first entry)

DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1748.

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;

KW diabetic neuropathy; arthritic pain; migraine headache;

KM infantile epilepsy; ataxia; ss.

XX Synthetic.

PN WO2004016754-A2.

XX 26-FEB-2004.

PF 14-AUG-2003; 2003WO-US025465.

PR 14-AUG-2002; 2002US-0403416P.

XX (PHAA ) PHARMACIA CORP.

PI Roberds SL;

DR WPI; 2004-203785/19.

XX New antisense compound targeted to a nucleic acid molecule encoding

PT Nav1.3, useful for useful for treating a disease or condition associated

PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure

PT disorder, or ataxia.

PS Claim 4; SEQ ID NO 1748; 417bp; English.

XX The present invention relates to an antisense compound targeted to a

CC nucleic acid molecule encoding Nav1.3, where the antisense compound

CC specifically hybridizes with and inhibits the expression of Nav1.3. The

CC compound and composition are useful for treating a disease or condition

CC associated with Nav1.3, e.g. pain including but not limited to

CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,

CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,

CC pain from burns, migraine headache, cluster headache, mild-to-moderate

CC headache; seizure disorder such as childhood seizure disorder, including

CC but not limited to neonatal or infantile epilepsy; or ataxia. The present

CC sequence represents a chimeric phosphorothioate oligonucleotide with

CC 2' MOE wings and a deoxy gap. Used during the antisense inhibition of

CC human Nav1.3 expression, the oligonucleotides are designed to target

CC different regions of the human Nav1.3 RNA.

XX Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 2.7e+02;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAG 1538

DB 19 AAAAAAAAAAAAAAAAAAG 1

## RESULT 155

ADK74367/C

ID ADK74367 standard; DNA; 20 BP.

XX ADK74367;

DT 20-MAY-2004 (first entry)

DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1701.

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;

KW diabetic neuropathy; arthritic pain; migraine headache;

KM infantile epilepsy; ataxia; ss.

XX Synthetic.

PN WO2004016754-A2.

XX 26-FEB-2004.

PF 14-AUG-2003; 2003WO-US025465.

PR 14-AUG-2002; 2002US-0403416P.

XX (PHAA ) PHARMACIA CORP.

PI Roberds SL;

DR WPI; 2004-203785/19.

XX New antisense compound targeted to a nucleic acid molecule encoding

PT Nav1.3, useful for useful for treating a disease or condition associated

PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure

PT disorder, or ataxia.

PS Claim 4; SEQ ID NO 1701; 417bp; English.

XX The present invention relates to an antisense compound targeted to a

CC nucleic acid molecule encoding Nav1.3, where the antisense compound

CC specifically hybridizes with and inhibits the expression of Nav1.3. The

CC compound and composition are useful for treating a disease or condition

CC associated with Nav1.3, e.g. pain including but not limited to

CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,

CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,

CC pain from burns, migraine headache, cluster headache, mild-to-moderate

CC headache; seizure disorder such as childhood seizure disorder, including

CC but not limited to neonatal or infantile epilepsy; or ataxia. The present

CC sequence represents a chimeric phosphorothioate oligonucleotide with

CC 2' MOE wings and a deoxy gap. Used during the antisense inhibition of

CC human Nav1.3 expression, the oligonucleotides are designed to target

CC different regions of the human Nav1.3 RNA.

XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 2.7e+02;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAG 1538

DB 20 AAAAAAAAAAAAAAAAAAG 2

## RESULT 156

ADP78117/C

ID ADP78117 standard; DNA; 20 BP.

AC ADP78117;

DT 12-AUG-2004 (first entry)

DE Chimeric phosphorothioate oligonucleotide #1916.

XX GFAT; Antidiabetic; Cardiac; Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;

```
KW reperfusion; ss.
XX Synthetic.
OS
XX Key Location/Qualifiers
XX modified_base 1..4
FT /*tag= a
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
FT modified_base 17..20
FT /*tag= b
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
FT
FT
XX WO2004035763-A2.
XX
XX 29-APR-2004.
XX
XX 02-OCT-2003; 2003WO-US033332.
XX
XX 17-OCT-2002; 2002US-0419268P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Broschat KO, Crosby SD;
XX
XX WPI; 2004-348453/32.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX ischemia/reperfusion injury.
XX
XX Claim 4; SEQ ID NO 1916; 175bp; English.
XX
XX The present invention relates to a compound which specifically hybridizes
XX with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX modulating the expression of GFAT, and which comprise any of the 3063
XX sequences of 20 base pairs, given in the specification. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX They are also useful in research and diagnostics for modulating the
XX expression of GFAT. The present sequence represents a chimeric
XX phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX oligonucleotides inhibit human GFAT expression.
XX
XX Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1248 TTTGTTTGTTTTAAATC 1266
DB 19 TCTGTTTGTTTTAAATC 1
RESULT 157
ADP78118/c
ID ADP78118 standard; DNA; 20 BP.
XX
XX ADP78118;
XX
XX 12-AUG-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide #1917.
XX
XX GFAT; Antidiabetic; Cardiant;
XX Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX reperfusion; ss.
```

```
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..4
FT /*tag= a
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
FT modified_base 17..20
FT /*tag= b
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
FT
FT
XX WO2004035763-A2.
XX
XX 29-APR-2004.
XX
XX 02-OCT-2003; 2003WO-US033332.
XX
XX 17-OCT-2002; 2002US-0419268P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Broschat KO, Crosby SD;
XX
XX WPI; 2004-348453/32.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX ischemia/reperfusion injury.
XX
XX Claim 4; SEQ ID NO 1917; 175bp; English.
XX
XX The present invention relates to a compound which specifically hybridizes
XX with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX modulating the expression of GFAT, and which comprise any of the 3063
XX sequences of 20 base pairs, given in the specification. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX They are also useful in research and diagnostics for modulating the
XX expression of GFAT. The present sequence represents a chimeric
XX phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX oligonucleotides inhibit human GFAT expression.
XX
XX Sequence 20 BP; 10 A; 2 C; 2 G; 6 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1251 GTTTGTTTATTCAGA 1269
DB 20 GTTTGTTTAAATCAAA 2
RESULT 158
ADP99303/c
ID ADP99303 standard; DNA; 20 BP.
XX
XX ADP99303;
XX
XX 23-SEP-2004 (first entry)
XX
XX Stem cell factor, SCF, universal PCR primer #3.
XX
XX SCF; stem cell factor; gene therapy; haematopoietic progenitor cell;
XX aplastic anaemia; paroxysmal nocturnal haemoglobinuria; myelofibrosis;
XX myelodysplasia; osteoporosis; metastatic carcinoma; acute leukaemia;
XX multiple myeloma; Hodgkin's disease; lymphoma; Gaucher's disease;
XX Niemann-Pick disease; Dettlerer-Sive disease;
XX refractory erythroidlastic anaemia; Di Guglielmo syndrome;
```

KM congestive splenomegaly; Kala awar; sarcoidosis;  
 KM primary splenic pancytopenia; miliary tuberculosis;  
 KM disseminated fungus disease; Fulminating septicemia; malaria;  
 KM vitamin B12 deficiency; folic acid deficiency; pyridoxine deficiency;  
 KM Diamond Blackfan anaemia; hypopigmentation disorder; plebism;  
 KM vitiligo; neurological damage; infertility; intestinal damage;  
 KM irradiation; chemotherapy; AIDS; haematopoietic recovery;  
 KM acute blood loss; neoplasm; cancer; ss; PCR; primer.  
 XX  
 OS Mammalia.  
 XX  
 PN US6759215-B1.  
 XX  
 PD 06-JUL-2004.  
 XX  
 PF 07-AUG-2000; 2000US-00635251.  
 XX  
 PR 16-OCT-1989; 89US-00422383.  
 XX  
 PR 11-JUN-1990; 90US-00537198.  
 PR 24-AUG-1990; 90US-00573616.  
 PR 01-OCT-1990; 90US-00589701.  
 PR 10-APR-1991; 91US-00684535.  
 PR 25-NOV-1992; 92US-00982255.  
 PR 21-DEC-1993; 93US-00172329.  
 PR 24-MAY-1995; 95US-00449182.  
 XX  
 PA (AMGE-) AMGEN INC.  
 XX  
 PI Zeebo KM, Bosesjman RA, Suggs SV, Martin FH;  
 XX  
 DR WPI; 2004-497128/47.  
 XX  
 PT Preparing a human stem cell factor (SCF) polypeptide, useful for treating  
 PT hematopoietic disorders, e.g., aplastic anemia, comprises growing host  
 PT cells transfected or transfected with DNA encoding a human SCF.  
 XX  
 PS Example 3; SEQ ID NO 33; 210bp; English.  
 XX  
 CC The invention relates to preparing a (vertebrate) human stem cell factor  
 CC (SCF) polypeptide comprising growing host cells transfected or  
 CC transfected with DNA encoding a human SCF that stimulates growth of  
 CC haematopoietic progenitor cells under nutrient conditions, the DNA being  
 CC operatively linked to an expression control sequence, and isolating the  
 CC polypeptide produced. Also included is a recombinant host cell  
 CC transformed or transfected with an expression construct comprising a  
 CC vertebrate SCF polypeptide-encoding DNA operatively linked to a  
 CC heterologous expression regulatory sequence, permitting the expression of  
 CC the vertebrate SCF polypeptide in the host cell. Disclosed as new are rat  
 CC and human nucleic acids encoding SCF, SCF proteins from a number of other  
 CC mammals and recombinantly expressed SCF protein fragments. The DNA  
 CC sequences are useful for effecting the large scale synthesis of SCF by a  
 CC variety of recombinant techniques or for generating new and useful viral  
 CC and circular plasmid DNA vectors, new and useful transformed and  
 CC transfected prokaryotic and eukaryotic host cells, and new and useful  
 CC methods for cultured growth of such host cells capable of expression of  
 CC SCF and its related products. The DNA sequences are also useful as  
 CC labelled probes in isolating human genomic DNA encoding SCF, in methods  
 CC of protein synthesis, in genetic therapy in humans and other mammals, and  
 CC in developing transgenic mammalian species which may serve as eukaryotic  
 CC hosts for production of SCF and SCF products in quantity. The SCF is  
 CC useful for treating haematopoietic disorders, e.g., aplastic anemia,  
 CC paroxysmal nocturnal haemoglobinuria, myelofibrosis, myelocystosis,  
 CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,  
 CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,  
 CC Letterer-Siwe disease, refractory erythroidlastic anaemia, Di Guglielmo  
 CC syndrome, congestive splenomegaly, Kala awar, sarcoidosis, primary  
 CC splenic pancytopenia, miliary tuberculosis, disseminated fungus disease,  
 CC fulminating septicemia, malaria, vitamin B 12 and folic acid deficiency,  
 CC pyridoxine deficiency, Diamond Blackfan anaemia, and hypopigmentation  
 CC disorders such as plebaldism and vitiligo. The SCF are also useful for  
 CC treating neurological damage, infertility states, intestinal damage  
 CC resulting from irradiation or chemotherapy, and AIDS. SCF is also useful  
 CC for enhancing haematopoietic recovery after acute blood loss and as a

CC boost to the immune system for fighting neoplasia (cancer). The present  
 CC sequence is a universal SCF PCR primer used in the isolation of SCF DNA.  
 XX  
 SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.7e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1519 TAAAAAAGCTAA 1537  
 DB 19 TAAAAAAGCTAA 1  
 RESULT 159  
 AAQ75724/C  
 ID AAQ75724 standard; DNA; 21 BP.  
 AC AAQ75724;  
 XX  
 DT 04-AUG-1995 (first entry)  
 DE Reverse transcription primer used in cDNA analysis technique.  
 XX  
 KM Analysis; gene expression; reverse transcription; primer; cDNA;  
 KM aggregate; restriction enzyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN JP06303997-A.  
 XX  
 PD 01-NOV-1994.  
 XX  
 PF 16-APR-1993; 93JP-00112515.  
 XX  
 PR 16-APR-1993; 93JP-00112515.  
 XX  
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.  
 XX  
 DR WPI; 1995-018287/03.  
 XX  
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
 PT by digestion with restriction enzymes.  
 XX  
 PS Disclosure; Page 8; 11pp; Japanese.  
 XX  
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
 CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)  
 CC and using the aggregate of mRNAs as the template for each reverse  
 CC transcription primer; (b) digesting each of the prepared aggregates of  
 CC the double-stranded cDNAs with restriction enzyme and; (c)  
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
 CC method can be used to analyse gene expression rapidly and easily  
 XX  
 SQ Sequence 21 BP; 4 A; 0 C; 0 G; 17 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.8; DB 1; Length 21;  
 Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1518 TTTAAAAAAGCTAA 1536  
 DB 19 TTTAAAAAAGCTAA 1  
 RESULT 160  
 AAQ75719/C  
 ID AAQ75719 standard; DNA; 21 BP.  
 AC AAQ75719;  
 XX  
 DT 04-AUG-1995 (first entry)

```

DE Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI, 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ7547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.1%; Score 15.8; DB 1; Length 21;
XX Best local Similarity 89.5%; Pred. No. 2.5e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0
OY 1518 TTTAAAAAAAAAACTAAA 1536
Db 19 TTTAAAAAAAAAAAAA 1

```

```

PT by digestion with restriction enzymes.
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
OY Query Match 1.1%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 2.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1518 TTTAAAAAAAAAAGTAAA 1536
19 TTTAAAAAAAAAAAAAAAAAAAA 1
RESULT 162
AAQ75723/C
ID AAQ75723 standard; DNA; 21 BP.
AC AAQ75723;
AT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
EE Analysis; gene expression; reverse transcription; primer: cDNA;
FW aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
FN 01-NOV-1994.
PD 16-APR-1993; 93JP-00112515.
PE 16-APR-1993; 93JP-00112515.
PR 16-APR-1993; 93JP-00112515.
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
DR Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
PT Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 3 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
OY Query Match 1.1%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 2.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1518 TTTAAAAAAAAAAGTAAA 1536
TTTTTTTTTTTTTTTT IIII

```

Db 19 TTTAAAAAAAAAAAAA 1

RESULT 163  
AAQ75726/C  
ID AAQ75726 standard; DNA; 21 BP.  
XX  
XX  
AC AAQ75726;  
XX  
XX  
DT 04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
XX  
KW Analysis; gene expression; reverse transcription; primer; cDNA;  
XX aggregate; restriction enzyme; ss.  
XX  
XX  
OS Synthetic.  
XX  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.  
XX  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
XX  
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
XX  
DR WPI; 1995-018287/03.  
XX  
XX  
PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
XX by digestion with restriction enzymes.  
XX  
XX  
PS Disclosure; Page 8; 11pp; Japanese.  
XX  
XX  
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
XX labeled reverse transcription primers (GENSEQ files AAQ75547-075798)  
XX and using the aggregate of mRNAs as the template for each reverse  
XX transcription primer; (b) digesting each of the prepared aggregates of  
XX the double-stranded cDNAs with restriction enzyme and; (c)  
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The  
XX method can be used to analyse gene expression rapidly and easily  
XX  
SQ Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1518 TTTAAAAAAAAAACTAAA 1536  
Db 19 TTTAAAAAAAAAAAAA 1

RESULT 164  
AAQ75731/C  
ID AAQ75731 standard; DNA; 21 BP.  
XX  
XX  
AC AAQ75731;  
XX  
XX  
DT 04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
XX  
KW Analysis; gene expression; reverse transcription; primer; cDNA;  
XX aggregate; restriction enzyme; ss.  
XX  
XX  
OS Synthetic.  
XX  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.

XX  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
XX  
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
XX  
DR WPI; 1995-018287/03.  
XX  
XX  
PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
XX by digestion with restriction enzymes.  
XX  
XX  
PS Disclosure; Page 8; 11pp; Japanese.  
XX  
XX  
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
XX labeled reverse transcription primers (GENSEQ files AAQ75547-075798)  
XX and using the aggregate of mRNAs as the template for each reverse  
XX transcription primer; (b) digesting each of the prepared aggregates of  
XX the double-stranded cDNAs with restriction enzyme and; (c)  
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The  
XX method can be used to analyse gene expression rapidly and easily  
XX  
SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1513 GTTAATTAAAAAAAAA 1531  
Db 20 GTTAAAAAAAAAAAAA 2

RESULT 165  
AAQ75734/C  
ID AAQ75734 standard; DNA; 21 BP.  
XX  
XX  
AC AAQ75734;  
XX  
XX  
DT 04-AUG-1995 (first entry)  
XX  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
XX  
KW Analysis; gene expression; reverse transcription; primer; cDNA;  
XX aggregate; restriction enzyme; ss.  
XX  
XX  
OS Synthetic.  
XX  
XX  
PN JP06303997-A.  
XX  
XX  
PD 01-NOV-1994.  
XX  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
XX  
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
XX  
DR WPI; 1995-018287/03.  
XX  
XX  
PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
XX by digestion with restriction enzymes.  
XX  
XX  
PS Disclosure; Page 8; 11pp; Japanese.  
XX  
XX  
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
XX labeled reverse transcription primers (GENSEQ files AAQ75547-075798)  
XX and using the aggregate of mRNAs as the template for each reverse  
XX transcription primer; (b) digesting each of the prepared aggregates of  
XX the double-stranded cDNAs with restriction enzyme and; (c)  
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The

CC method can be used to analyse gene expression rapidly and easily  
XX  
SQ Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1513 GTTAATTAAAAA 1531  
DB 20 GTTAAAAA 2  
RESULT 166  
AAQ75720/C  
ID AAQ75720 standard; DNA; 21 BP.  
XX  
AC AAQ75720;  
XX  
DT 04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
KW Analysis; gene expression; reverse transcription; primer; cDNA;  
XX aggregate; restriction enzyme; ss.  
XX  
OS Synthetic.  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
DR WPI; 1995-018287/03.  
XX  
XX  
XX Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.  
XX  
PS Disclosure; Page 8; 11pp; Japanese.  
XX  
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENSEQ files AAQ75517-075798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily  
XX  
SQ Sequence 21 BP; 3 A; 0 C; 1 G; 17 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1518 TTTAAAAAAGTAAA 1536  
DB 19 TTTAAAAA 1  
RESULT 167  
AAZ90186  
ID AAZ90186 standard; cDNA; 21 BP.  
XX  
AC AAZ90186;  
XX  
DT 19-MAY-2000 (first entry)  
XX

DE Primer 256A used in human chemokine receptor sequencing.  
XX  
KW Chemokine receptor; interleukin-8 compound inhibitor; chromosome 7p22;  
KW inflammation; wound healing; neutropenia; myeloid leukaemia; tumour;  
KW toxin delivery; hypermegakaryocytopoietic disease;  
XX polycythaemia vera. primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WC200000515-A2.  
XX  
PD 06-JAN-2000.  
XX  
XX 29-JUN-1999; 99WO-US012829.  
XX  
PF 29-JUN-1999; 98US-00106800.  
XX  
PR 22-JAN-1999; 99US-00236166.  
XX  
XX (HYSE-) HYSEQ INC.  
XX  
DR WPI; 2000-170907/15.  
XX  
XX  
XX New nucleic acid encoding chemokine receptor, useful for diagnosis and  
PT treatment of e.g. neutropenia, inflammation and leukemia.  
XX  
XX  
XX Example 33; Page 126; 138pp; English.  
XX  
XX This sequence represents a primer used to obtain the sequence of the  
CC human chemokine receptor of the invention. The chemokine receptor  
CC nucleotide sequence (see AAZ90191) is derived from a human foetal liver/  
CC spleen cDNA library. The chemokine receptor (see AAY78856) encoded by the  
CC nucleotide sequence inhibits the activity of interleukin-8-type compounds  
CC through competition for cell binding sites. The chemokine receptor gene  
CC is located on the short arm of chromosome 7 at 7p22. The polynucleotide  
CC encoding the chemokine receptor is useful as a hybridization probe or a  
CC PCR primer, the nucleotide sequence may also be used for chromosome/gene  
CC mapping or in the recombinant production of polypeptides and the  
CC production of antisense or triplex-forming molecules for the control of  
CC gene expression. The chemokine receptor polypeptides are used to raise  
CC specific antibodies, also for purification, detection or modulation of  
CC interleukin-8-type chemokines (for diagnosis or prognosis, or monitoring  
CC chemokine recruitment at a site of infection or inflammation). The  
CC protein sequence can also be used as molecular weight markers or food  
CC supplements, and to screen compound libraries for specific binding  
CC agents, potential agonists or antagonists. Antibodies raised against the  
CC chemokine receptor polypeptide sequence are used to detect or purify the  
CC polypeptide, also for the diagnosis and treatment of activated or  
CC inflamed cells or tissues, and to promote the healing of wounds. The  
CC polypeptide and antibodies are also used to prevent neutropenia  
CC (associated with chemotherapy or radiation treatment to protect myeloid  
CC precursors), inflammation or other immune responses; also conditions  
CC associated with hyperproliferation of progenitor cells (e.g. some  
CC myelogenous leukaemias, polycythaemia vera and hypermegakaryocytopoietic  
CC diseases). The antibodies are potentially useful therapeutically, e.g. to  
CC carry toxins to tumour cells  
XX  
SQ Sequence 21 BP; 3 A; 5 C; 10 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 569 CAGCAGGCGCGGCTAGG 587  
DB 1 CAGCAGGCTGCGCTAGG 19  
RESULT 168  
AAZ90191/C  
ID AAZ90191 standard; cDNA; 21 BP.  
XX  
AC AAZ90191;  
XX



DT 19-MAY-2000 (first entry)  
 XX PCR prime used for cloning human chemokine receptor.  
 DE  
 XX Chemokine receptor; interleukin-8 compound inhibitor; chromosome 7p22;  
 KW inflammation; wound healing; neutropenia; myeloid leukaemia; tumour;  
 KW toxin delivery; hypomegakaryocytopenic disease;  
 KW polycythaemia vera. PCR primer: ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200000515-A2.  
 XX  
 PD 06-JAN-2000.  
 XX  
 XX 29-JUN-1999; 99WO-US012829.  
 PF  
 XX 29-JUN-1999; 98US-00106800.  
 PR 22-JAN-1999; 99US-00236166.  
 XX  
 XX (HYSE-) HYSEQ INC.  
 PA  
 DR WPI; 2000-170907/15.  
 XX  
 XX New nucleic acid encoding chemokine receptor, useful for diagnosis and  
 PT treatment of e.g. neutropenia, inflammation and leukemia.  
 XX  
 XX Example 33; Page 127; 138pp; English.  
 PS  
 XX This sequence represents a PCR primer used in the cloning of the human  
 CC chemokine receptor of the invention. The chemokine receptor nucleotide  
 CC sequence (see AA290175) is derived from a human foetal liver-spleen cDNA  
 CC library. The chemokine receptor (see AA178856) encoded by the nucleotide  
 CC sequence inhibits the activity of interleukin-8-type compounds through  
 CC competition for cell binding sites. The chemokine receptor gene is  
 CC located on the short arm of chromosome 7 at 7p22. The polynucleotide  
 CC encoding the chemokine receptor is useful as a hybridization probe or a  
 CC PCR primer. The nucleotide sequence may also be used for chromosome/gene  
 CC mapping or in the recombinant production of polypeptides and the  
 CC production of antisense or triplex-forming molecules for the control of  
 CC gene expression. The chemokine receptor polypeptides are used to raise  
 CC specific antibodies, also for purification, detection or modulation of  
 CC interleukin-8-type chemokines (for diagnosis or prognosis, or monitoring  
 CC chemokine recruitment at a site of infection or inflammation). The  
 CC protein sequence can also be used as molecular weight markers or food  
 CC supplements, and to screen compound libraries for specific binding  
 CC agents, potential agonists or antagonists. Antibodies raised against the  
 CC chemokine receptor polypeptide sequence are used to detect or purify the  
 CC polypeptide, also for the diagnosis and treatment of activated or  
 CC inflamed cells or tissues, and to promote the healing of wounds. The  
 CC polypeptide and antibodies are also used to prevent neutropenia  
 CC (associated with chemotherapy or radiation treatment to protect myeloid  
 CC precursors), inflammation or other immune responses; also conditions  
 CC associated with hyperproliferation of progenitor cells (e.g. some  
 CC myelogenous leukaemias, polycythaemia vera and hypomegakaryocytopenic  
 CC diseases). The antibodies are potentially useful therapeutically, e.g. to  
 CC carry toxins to tumour cells  
 XX  
 SQ Sequence 21 BP; 3 A; 10 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.8; DB 1; Length 21;  
 Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 569 CAGCAGGGCGGCGCTAGG 587  
 DB 21 CAGCAGGCTGCTGCGCTAGG 3  
 RESULT 169  
 ABS97869  
 ID ABS97869 standard; DNA; 21 BP.  
 XX

AC ABS97869;  
 XX  
 XX 23-DEC-2002 (first entry)  
 DT  
 XX Human UDP-glucuronosyl transferase 2A8 gene PCR primer #6.  
 DE  
 XX Human; ss; primer; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1; PCR;  
 KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP4502E1; LTF;  
 KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR112;  
 KW aryl hydrocarbon receptor nuclear translocator; AHR; cathepsin S; CTSS;  
 KW cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological;  
 KW epoxide hydrolase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;  
 KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;  
 KW NNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;  
 KW NADPH quinone oxidoreductase 2; NQO2; sulfoxyltransferase thermolabile; STM;  
 KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;  
 KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; uridinease receptor; UPA;  
 KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;  
 KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;  
 KW altered drug metabolism; cardiovascular function; colorectal tumour;  
 KW central nervous system; pulmonary; immunological.  
 XX  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO200257410-A2.  
 PN  
 XX 25-JUL-2002.  
 PD  
 XX 28-NOV-2001; 2001WO-US044838.  
 PF  
 XX 28-NOV-2000; 2000US-00724389.  
 PR  
 XX (DNAS-) DNA SCI LAB INC.  
 PA  
 XX Guida M, Hall J;  
 DR WPI; 2002-698522/75.  
 XX  
 XX Isolated nucleic acid molecules having polymorphisms in known human genes  
 PT e.g. cytochrome P450 and cathepsin S useful as genetic linkage markers  
 PT for locating, identifying and characterizing the genes responsible for  
 PT disorder-related traits.  
 XX  
 XX Example 18; Page 133; 714pp; English.  
 PS  
 XX This invention relates to the sequence of an isolated nucleic acid  
 XX molecule comprising at least one base variation from that of a known  
 CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),  
 CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),  
 CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator  
 CC (AHR), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding  
 CC inhibitor (DBI), epoxide hydrolase 2 (EPHX2), 5-lipoxygenase activating  
 CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl  
 CC transferase (NNMT), kallikrein 2 KLK2, nicotinamide -N-methyl  
 CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),  
 CC sulfoxyltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4  
 CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl  
 CC transferase (UGT2B15), uridinease receptor (UPA), multidrug resistance 1  
 CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3  
 CC (MRP3), orphan nuclear receptor (NR112), or acetylcholine muscarinic  
 CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.  
 CC The polymorphisms in the human genes cited in the invention are useful as  
 CC genetic linkage markers for locating and characterizing the genes that  
 CC are responsible for specific traits within the genome and eventually  
 CC identifying the genes responsible for a variety of disorder-related  
 CC traits as a result of their e.g., overexpression, constitutive  
 CC expression, mutation or underexpression, which may be used in diagnosing  
 CC and/or treating the disorders. The nucleic acid molecules comprising the  
 CC polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP4502E1,  
 CC AHRNT, EPHX2, GST12, NNMT, NQO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR,  
 CC MDR1 and/or MRP3 are useful for screening individuals for altered drug  
 CC metabolism. The polymorphic sequences contained in CYP4501A1, CYP4501A2,

```
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in PLAP and HMMT for altered pulmonary.
CC immunological or haematological function, in KXK2 for altered serine
CC protease activity in the prostate, in LTR for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a PCR
CC primer used to amplify the sequences of the invention
XX
SQ Sequence 21 BP; 3 A; 1 C; 4 G; 13 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. NO. 2.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1305 ATTTTATTTTATTTTACAG 1323
Db 2 ATTTTATTTTTCGAGAG 20
RESULT 170
ADK01287/c
ID ADK01287 standard; DNA; 21 BP.
AC ADK01287;
XX
XX 06-MAY-2004 (first entry)
DE
DE Rat DNA microarray capture oligonucleotide #7.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
OS
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
```

```
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. NO. 2.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAAAAAGTAAA 1537
Db 19 TAAAAAAAAAAAAAAAAA 1
RESULT 171
ADK01290/c
ID ADK01290 standard; DNA; 21 BP.
AC ADK01290;
XX
XX 06-MAY-2004 (first entry)
DE
DE Rat DNA microarray capture oligonucleotide #10.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
OS
XX PN DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
```

CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.

SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAAAAGTAAAA 1537

DB 19 TAAAAAAAAAAAAAAAAA 1

RESULT 172

ADK01341/C

ID ADK01341 standard; DNA; 21 BP.

AC ADK01341;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #61.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

OS DE10208794-A1.

PD 04-SEP-2003.

PE 28-FEB-2002; 2002DE-01008794.

PR 28-FEB-2002; 2002DE-01008794.

PA (DEGS ) DEGUSSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

PA WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression  
PT patterns and screening active agents, uses capture agent with variable  
PT and constant regions.

XX Example; Page 6; 8pp; German.

CC This invention describes a novel method for sorting single-stranded  
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture  
CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
CC least once in each nucleic acid and a 3'-variable, discriminatory region  
CC that comprises all possible combinations of up to 10 nucleotides to allow

CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
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CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.

SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAAAAGTAAAA 1537

DB 21 TAAAAAAAAAAAAAAAAA 3

RESULT 173

ADK01293/C

ID ADK01293 standard; DNA; 21 BP.

AC ADK01293;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #13.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

OS DE10208794-A1.

PD 04-SEP-2003.

PE 28-FEB-2002; 2002DE-01008794.

PR 28-FEB-2002; 2002DE-01008794.

PA (DEGS ) DEGUSSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

PA WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression  
PT patterns and screening active agents, uses capture agent with variable  
PT and constant regions.

XX Example; Page 5; 8pp; German.

CC This invention describes a novel method for sorting single-stranded  
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture  
CC agents that are (a) immobilised on the surface of a solid matrix and (b)

CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
CC least once in each nucleic acid and a 3'-variable, discriminatory region  
CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.

SQ Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 21;

Best Local Similarity 89.5%; Pred. No. 2.5e+02;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1519 TAAAAAAGTAAAA 1537

DB 19 TAAAAAAGTAAAA 1

RESULT 174  
ADK01285/C

ID ADK01285 standard; DNA; 21 BP.

AC ADK01285;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #5.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

OS DE10208794-A1.

PN 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGUS ) DEGUSSA BIOACTIVES GMBH.

PA Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression  
PT patterns and screening active agents, uses capture agent with variable  
PT and constant regions.

PS Example; Page 4; 8pp; German.

XX

CC This invention describes a novel method for sorting single-stranded  
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture  
CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
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CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
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CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.

SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 21;

Best Local Similarity 89.5%; Pred. No. 2.5e+02;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1519 TAAAAAAGTAAAA 1537

DB 19 TAAAAAAGTAAAA 1

RESULT 175  
ADK01291/C

ID ADK01291 standard; DNA; 21 BP.

AC ADK01291;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #11.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

OS DE10208794-A1.

PN 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGUS ) DEGUSSA BIOACTIVES GMBH.

PA Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression  
PT patterns and screening active agents, uses capture agent with variable  
PT and constant regions.

PS

PT and constant regions.  
 XX  
 XX  
 PS Example: Page 5; 8pp; German.  
 CC This invention describes a novel method for sorting single-stranded  
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
 CC reading out, where the nucleic acids are selectively bound using capture  
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
 CC comprise variable and non-variable regions. The capture oligonucleotides  
 CC have a 5'-invariable anchor region, the complement of which is present at  
 CC least once in each nucleic acid and a 3'-variable, discriminatory region  
 CC that comprises all possible combinations of up to 10 nucleotides to allow  
 CC binding of particular sorts of single stranded nucleic acids. The capture  
 CC agents are particularly locked nucleic acids (LNA) and the anchor region  
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
 CC capture oligonucleotides are biotinylated and immobilised on a surface by  
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
 CC metal, resin, gel, crystalline material and/or membrane, having semi-  
 CC conducting properties and especially in the form of a chip. Its surface  
 CC is particularly a layer of (bio)molecular filaments and binding of single  
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
 CC physical, stimulated by an electrical field or through a molecular sieve.  
 CC The method is used (i) for analysis of patterns, especially in mucosal,  
 CC hair root, blood, nerve or germ cells and (ii) for determining the  
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
 CC additives or supplements, especially minerals, trace elements, organic  
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
 CC mixtures. The method provides rapid, inexpensive and reproducible  
 CC representation of differences in pools of nucleic acids from cells. It  
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
 CC can detect very small differences in the nucleic acid pool. Since the  
 CC method is based on comparison of nucleic acid pools, not individual  
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
 CC capture probes used in the method of the invention.  
 XX  
 SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.8; DB 1; Length 21;  
 Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1519 TAAAAAAAAAAGTAAAA 1537  
 Db 19 TAAAAAAAAAAGTAAAA 1  
 RESULT 176  
 ADK01295/C  
 ID ADK01295 standard; DNA; 21 BP.  
 XX  
 AC ADK01295;  
 XX  
 DT 06-MAY-2004 (first entry)  
 XX  
 DE Rat DNA microarray capture oligonucleotide #15.  
 XX  
 KM ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
 KM blood; nerve; germ cell; food additive; food supplement.  
 XX  
 OS Rattus sp.  
 OS DE10208794-A1.  
 PN 04-SEP-2003.  
 PD 28-FEB-2002; 2002DE-01008794.  
 PF 28-FEB-2002; 2002DE-01008794.  
 PR 28-FEB-2002; 2002DE-01008794.  
 XX (DEGS ) DEGUSA BIOACTIVES GMBH.  
 PA Boekenkamp D, Dieck HT, Hoppe H;  
 PR  
 XX

DR WPI; 2003-714082/68.  
 XX  
 XX  
 PT Sorting single-stranded nucleic acid, useful for analyzing expression  
 PT patterns and screening active agents, uses capture agent with variable  
 PT and constant regions.  
 PS Example: Page 5; 8pp; German.  
 CC This invention describes a novel method for sorting single-stranded  
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
 CC reading out, where the nucleic acids are selectively bound using capture  
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
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 CC least once in each nucleic acid and a 3'-variable, discriminatory region  
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 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
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 CC can detect very small differences in the nucleic acid pool. Since the  
 CC method is based on comparison of nucleic acid pools, not individual  
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
 CC capture probes used in the method of the invention.  
 XX  
 SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.8; DB 1; Length 21;  
 Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1519 TAAAAAAAAAAGTAAAA 1537  
 Db 19 TAAAAAAAAAAGTAAAA 1  
 RESULT 177  
 ADK01286/C  
 ID ADK01286 standard; DNA; 21 BP.  
 XX  
 AC ADK01286;  
 XX  
 DT 06-MAY-2004 (first entry)  
 XX  
 DE Rat DNA microarray capture oligonucleotide #6.  
 XX  
 KM ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
 KM blood; nerve; germ cell; food additive; food supplement.  
 XX  
 OS Rattus sp.  
 OS DE10208794-A1.  
 PN 04-SEP-2003.  
 PD 28-FEB-2002; 2002DE-01008794.  
 PF 28-FEB-2002; 2002DE-01008794.  
 PR 28-FEB-2002; 2002DE-01008794.  
 XX  
 XX

PA (DEGS ) DEGUSA BIOACTIVES GMBH.  
XX Boekenkamp D, Dieck HT, Hoppe H;  
XX WPI; 2003-714082/68.  
XX  
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XX Example; Page 5; 8pp; German.  
XX  
XX This invention describes a novel method for sorting single-stranded  
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CC least once in each nucleic acid and a 3'-variable, discriminatory region  
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CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.  
XX  
XX Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;  
SQ  
XX  
XX Query Match 1.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1519 TAAAAAAAAAAGTAAAA 1537  
Db 19 TAAAAAAAAAAGTAAAA 1  
XX  
XX RESULT 178  
ADK01331/C  
ID ADK01331 standard; DNA; 21 BP.  
XX  
XX ADK01331;  
XX  
XX 06-MAY-2004 (first entry)  
XX  
XX Rat DNA microarray capture oligonucleotide #51.  
XX  
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
KW blood; nerve; germ cell; food additive; food supplement.  
XX  
XX Rattus sp.  
XX DE10208794-A1.  
XX PN  
XX 04-SEP-2003.  
XX PD  
XX

PF 28-FEB-2002; 2002DE-01008794.  
XX  
XX 28-FEB-2002; 2002DE-01008794.  
XX  
XX (DEGS ) DEGUSA BIOACTIVES GMBH.  
XX Boekenkamp D, Dieck HT, Hoppe H;  
XX WPI; 2003-714082/68.  
XX  
XX Sorting single-stranded nucleic acid, useful for analyzing expression  
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CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
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CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
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CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.  
XX  
XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;  
SQ  
XX  
XX Query Match 1.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1519 TAAAAAAAAAAGTAAAA 1537  
Db 20 TAAAAAAAAAAGTAAAA 2  
XX  
XX RESULT 179  
ADK01289/C  
ID ADK01289 standard; DNA; 21 BP.  
XX  
XX ADK01289;  
XX  
XX 06-MAY-2004 (first entry)  
XX  
XX Rat DNA microarray capture oligonucleotide #9.  
XX  
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
KW blood; nerve; germ cell; food additive; food supplement.  
XX  
XX Rattus sp.  
XX OS  
XX

```
PN DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.8; DB 1; Length 21;
XX Best Local Similarity 89.5%; Pred. No. 2.5e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAGTAAAA 1537
DB 19 TAAAAAAGTAAAA 1
RESULT 180
ADK01294/C
ID ADK01294 standard; DNA; 21 BP.
XX
XX ADK01294;
AC
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #14.
XX
XX 68; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
```

```
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.8; DB 1; Length 21;
XX Best Local Similarity 89.5%; Pred. No. 2.5e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAGTAAAA 1537
DB 19 TAAAAAAGTAAAA 1
RESULT 181
ADK01330/C
ID ADK01330 standard; DNA; 21 BP.
XX
XX ADK01330;
AC
XX 06-MAY-2004 (first entry)
XX
XX
```

```

XX DE Rat DNA microarray capture oligonucleotide #50.
XX XX
XX XX es; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.
XX XX
XX OS Rattus sp.
XX XX
XX PN DE10208794-A1.
XX XX
XX PD 04-SEP-2003.
XX XX
XX PF 28-FEB-2002; 2002DE-01008794.
XX XX
XX PR 28-FEB-2002; 2002DE-01008794.
XX PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX XX
XX PI Boekenkamp D, Dieck HT, Hoppe H;
XX XX
XX DR WPI; 2003-714082/68.
XX XX
XX PT Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS
XX PS Example; Page 5; 8pp; German.
XX XX
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-variable and anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX XX
XX SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX XX
XX Query Match 1.1%; Score 15.8; DB 1; Length 21;
XX Best Local Similarity 89.5%; Pred. No. 2.5e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0
OY 1519 TAAAAAAGTAAA 1537
OY |||||
OY |||||
Db 20 TAAAAA 2

```

AC ABB25933;  
XX  
XX 29-JUL-2004 (first entry)  
XX  
DE AA505075-derived oligonucleotide SEQ ID 4945.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KM surfactant depletion; anti-allergic; anti-inflammatory; antitachycardic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
OS  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 4945; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, and surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has anti-allergic, anti-inflammatory, antitachycardic, analgesic, hypotensive, immunosuppressive and cytotoxic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 21 BP; 17 A; 0 C; 0 G; 4 T; 0 U; 0 Other;



Query Match 1.1%; Score 15.8; DB 1; Length 21;  
 Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1518 TTTAAAAAAAGTAAA 1536  
 |||||  
 DB 3 TTTAAAAAAAGTAAA 21

## RESULT 183

ADQ30710  
 ID ADQ30710 standard; DNA; 21 BP.

AC ADQ30710;  
 XX

DT 23-SEP-2004 (first entry)

DE Device with substance to aid adhesion of biological material aptamer #4.

XX aptamer; ss; implant; biological material adhesion; bioreactor.

OS Synthetic.

XX WO2004055153-A2.

PD 01-JUL-2004.

PF 10-DEC-2003; 2003WO-EP013989.

PR 17-DEC-2002; 2002DE-01058924.

PA (UYTU-) UNIV TUEBINGEN EBERHARD-KARLS.

PI Schluesener H, Wendel H;

DR WPI; 2004-517421/49.

XX Device coated with aptamers for binding specific biological materials,  
 PT useful e.g. as stent or component of extracorporeal circulation system,  
 PT also new aptamers specific for endothelial precursor cells.

PS Claim 15; SEQ ID NO 4; 31pp; German.

CC The present invention relates to a device that has at least one surface  
 CC that contacts tissue and/or liquids of the human or animal body and is at  
 CC least partly coated with a substance that mediates binding of biological  
 CC materials. The new feature is that this substance is an aptamer. The  
 CC device is particularly an implant, e.g. a stent, vascular prosthesis,  
 CC heart valve, joint etc., but may also be a component of an extracorporeal  
 CC circulation system, a nanomaterial for tissue engineering and vascular  
 CC surgery, a catheter, contact lens, storage device for blood etc., also a  
 CC bioreactor for isolation and culture of selected cell types, for  
 CC production of substances or for growing organ replacements. The present  
 CC sequence is an aptamer suitable for use in the device of the invention.

XX Sequence 21 BP; 0 A; 7 C; 14 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 21;  
 Best Local Similarity 89.5%; Pred. No. 2.5e+02;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 426 GCGGCTCGCGCGCGCG 444  
 |||||  
 DB 2 GCGGCGCGCGCGCGCG 20

## RESULT 184

ADQ30708/C  
 ID ADQ30708 standard; DNA; 21 BP.

AC ADQ30708;  
 XX

DT 23-SEP-2004 (first entry)

XX Device with substance to aid adhesion of biological material aptamer #2.  
 DE aptamer; ss; implant; biological material adhesion; bioreactor.

OS Synthetic.

XX WO2004055153-A2.

PD 01-JUL-2004.

PF 10-DEC-2003; 2003WO-EP013989.

PR 17-DEC-2002; 2002DE-01058924.

PA (UYTU-) UNIV TUEBINGEN EBERHARD-KARLS.

PI Schluesener H, Wendel H;

DR WPI; 2004-517421/49.

XX Device coated with aptamers for binding specific biological materials,  
 PT useful e.g. as stent or component of extracorporeal circulation system,  
 PT also new aptamers specific for endothelial precursor cells.

PS Claim 15; SEQ ID NO 2; 31pp; German.

CC The present invention relates to a device that has at least one surface  
 CC that contacts tissue and/or liquids of the human or animal body and is at  
 CC least partly coated with a substance that mediates binding of biological  
 CC materials. The new feature is that this substance is an aptamer. The  
 CC device is particularly an implant, e.g. a stent, vascular prosthesis,  
 CC heart valve, joint etc., but may also be a component of an extracorporeal  
 CC circulation system, a nanomaterial for tissue engineering and vascular  
 CC surgery, a catheter, contact lens, storage device for blood etc., also a  
 CC bioreactor for isolation and culture of selected cell types, for  
 CC production of substances or for growing organ replacements. The present  
 CC sequence is an aptamer suitable for use in the device of the invention.

XX Sequence 21 BP; 0 A; 14 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.8; DB 1; Length 21;  
 Best Local Similarity 89.5%; Pred. No. 2.5e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 426 GCGGCTCGCGCGCGCG 444  
 |||||  
 DB 20 GCGGCGCGCGCGCGCG 2

## RESULT 185

ADP17373  
 ID ADP17373 standard; DNA; 22 BP.

AC ADP17373;  
 XX

DT 12-FEB-2004 (first entry)

DE Small cell lung cancer cell line associated primer. SEQ ID NO 416.

XX cell surface molecule; malignant cell line; cytostatic; immunostimulant;  
 XX cell vaccine; gene therapy; premalignant; cancer; binding partner; ss; primer.

OS unidentified.

XX WO200300928-A2.

PD 03-JAN-2003.

PF 19-JUN-2002; 2002WO-IB003534.

PR 25-JUN-2001; 2001DK-00000992.

PR 02-JUL-2001; 2001US-0301818P.

```

XX (ODIN-) ODIN MEDICAL AS.
PA
XX Poulsen HS, Pedersen N, Mortensen S, Sorensen SB, Petersen MW;
PI Elner HI;
XX WPI: 2003-247897/24.
XX
XX Identifying cell surface molecules with differential expression in
PT malignant cells, by comparing expression of mRNA in malignant cells and
PT normal tissue, and selecting nucleic acid sequences encoding the
PT molecules.
XX
XX Example 1; SEQ ID NO 416; 223bp; English.
XX
XX The invention relates to a novel method for identifying cell surface
XX molecules expressed at different levels in malignant cells. The method
XX involves providing at least 3 malignant cell lines and 3 total RNA
XX samples derived from normal tissue, comparing expression of mRNA in cell
XX lines and normal tissue, identifying nucleic acid sequences for a
XX difference in amount of mRNA expressed in cell lines and normal tissue,
XX and selecting nucleic acid sequences encoding for the cell surface
XX molecules. The cell surface molecule compositions have cytosolic and
XX immunostimulant activities. The cell surface molecule proteins can be
XX used to create a vaccine and their encoding nucleotides used in gene
XX therapy. The specific binding partner, capable of associating with the
XX cell surface molecules, is useful for the preparation of a targeting
XX complex, comprising a binding partner capable of binding to the cell surface
XX molecules. The targeting complex is useful in the treatment of
XX premalignant and/or malignant conditions in an individual. The condition
XX includes cancer selected from melanoma, brain tumour (e.g. glioblastoma,
XX neuroblastoma, astrocytoma, oligodendroglioma, meningioma,
XX medulloblastoma, neuroma, ependymoma, craniopharyngioma, pineal tumour,
XX germ cell tumour and schwannoma), breast cancer, lung cancer (e.g. small
XX cell lung cancer (SCLC) and non-small cell lung cancer (NSCLC)), prostate
XX cancer, cervix cancer, uterine cancer, ovarian cancer, leukaemia, colon
XX cancer, rectum cancer and bladder cancer. The targeting complex is useful
XX for the preparation of a medicament for the treatment (ameliorating or
XX prophylactic) of a premalignant and/or malignant conditions in an
XX individual in need of it. This polynucleotide sequence represents an
XX oligo used in the exemplification of the invention.
XX
XX Sequence 22 BP; 2 A; 3 C; 9 G; 8 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.1%; Score 15.8; DB 1; Length 22;
XX Best Local Similarity 89.5%; Pred. No. 2.4e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 989 GTTCCTGTTCTGTGGAGAA 1007
DB 2 GTTCTTGTCCTGTGGGAA 20
XXXXXXXXXXXXXXXXXXXX
RESULT 186
AA064724
ID AA064724 standard; CDNA to mRNA; 22 BP.
XX
XX AA064724;
AC
XX
XX 25-MAR-2003 (revised)
DT 04-JAN-1995 (first entry)
XX
XX 2',5'-linked tetraadenylate-anti(AT)18 oligonucleotide chimeric mol.
DE
XX
XX antisense; 2',5'-tetraadenylate; 2-5A dependent RNase activator;
KM RNA cleavage; antiviral therapy; chimeric molecule; PKR;
KW protein synthesis regulation; phosphorylation; eIF-2alpha;
KM eukaryotic translation initiation factor; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH misc_feature 1..4
FT

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```

FT /*tag= a
FT /label= 2',5'-linked tetraadenylate
FT /note= "nucleotides linked through phosphodiester bonds
FT at hydroxyl groups of 2' and 5' carbons"
FT 4..5
FT /*tag= b
FT /note= "the 2-5A moiety (*tag = a) and the antisense DNA
FT sequence (*tag = c) are linked by two 1,4-butanediol
FT molecules linked through phosphodiester bonds"
FT 5..22
FT misc_feature
FT /*tag= c
FT /note= "antisense region, complementary to oligo dT"
XX
XX W09409129-A2.
XX
XX 28-APR-1994.
XX
XX 20-OCT-1993; 93WO-US010103.
XX
XX 21-OCT-1992; 92US-00965666.
XX 17-SEP-1993; 93US-00123449.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX (CLEV-) CLEVELAND CLINIC RES INST.
PA
XX Torrence P, Silverman R, Maitra R, Lesiak K;
XX
XX WPI: 1994-151315/18.
XX
XX Specific cleavage of RNA, useful partic. for treating viral infection,
XX cancers, etc., by using anti-sense oligo:nucleotide coupled to activator
XX of 2-5A dependent RNase.
XX
XX Example 9; Page 66; 86pp; English.
XX
XX This sequence was used to determine whether 2-5A-antisense chimeric
XX molecules are inhibitory to cell growth. The molecules AA064709, AA064711
XX and AA064724 all lacked cytotoxicity. In the novel 2-5A-antisense
XX oligonucleotide chimeric molecules, the antisense region targets the
XX chimeric molecule to a particular region of RNA to be specifically
XX cleaved and the 2',5'-linked tetraadenylate tail activates the 2-5A
XX RNase. Typical applications are treatment of viral infections (esp. for
XX cleavage of an RNA virus genome), cancer, leukaemia, cardiovascular
XX disorders (e.g. restenosis after angioplasty), genetic disorders,
XX osteoarthritis or rheumatoid arthritis. (Updated on 25-MAR-2003 to
XX correct PN field.)
XX
XX Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.1%; Score 15.6; DB 1; Length 22;
XX Best Local Similarity 81.8%; Pred. No. 2.7e+02;
XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 1516 AATTAAAAAAGTAAAAA 1537
DB 1 AAAAAAAAAAAAAAAAAA 22
XXXXXXXXXXXXXXXXXXXX
RESULT 187
AAA88220/C
ID AAA88220 standard; DNA; 22 BP.
XX
XX AAA88220;
AC
XX
XX 14-DEC-2000 (first entry)
DT
XX
XX EGR-1 double stranded probe B.
DE
XX
XX Human; transforming growth factor beta 1; TGF-beta1; phosphothiate;
KM antisense oligonucleotide; EGR; early growth response; cytostatic;
KW gene therapy; anti-metastatic; tumour; cancer; probe; ss.
XX
XX Homo sapiens.
OS

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XX PN WO000045771-A2.
XX PD 10-AUG-2000.
XX PF 04-FEB-2000; 2000WO-US002799.
XX PR 05-FEB-1999; 99US-0118912P.
XX PA (MERC/) MERCOLA D.
XX PA (ADAM/) ADAMSON E.
XX PI Mercola D, Adamson E;
XX WP1; 2000-524345/47.
XX
XX PT Increasing expression of an anti-metastatic factor in a tumor cell for
XX PT treating cancer, comprises administering a vector containing a nucleic
XX PT acid encoding an early growth response.
XX
XX PS Example 7, Fig 6; 82pp; English.
XX
XX CC The present invention describes a method for increasing (A) expression of
XX CC an anti-metastatic factor in a tumour cell comprises administering a
XX CC vector containing a nucleic acid sequence encoding an EGR (early growth
XX CC response) (I) or an active portion of an EGR (II). The method is used to
XX CC increase expression of an anti-metastatic factor in a tumour cell;
XX CC interfere with the metastasis of a tumour cell; identify compounds or
XX CC compositions that increase or decrease the expression of EGR in a cell,
XX CC the expression of an anti-metastatic factor, or cell adhesion to a
XX CC substrate; and interfere with the proliferation of a tumour cell. The
XX CC invention allows the role of specific cellular components in pathological
XX CC states, such as tumours and cancers to be appreciated. The growth of
XX CC cancer cells can be regulated by promoting or supplementing the
XX CC expression of EGR, or fragments, in cells. The present sequence
XX CC represents an EGR-1 double stranded probe, which is used in an example
XX CC from the present invention
XX
XX SQ Sequence 22 BP; 1 A; 10 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.6; DB 1; Length 22;
XX Best Local Similarity 81.8%; Pred. No. 2.7e+02;
XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0
XX
XX QY 567 CGCAGCAGCGGCGGCGGTAGCA 598
XX ||||| ||||| ||||| |||||
XX 22 CACAGCCGCGCGCGGCGGTGGA 1
XX
XX RESULT 188
XX AAF17413
XX ID AAF17413 standard; DNA; 22 BP.
XX
XX AC AAF17413;
XX DT 09-MAR-2001 (first entry)
XX DE L1 cleavage site related sequence #3.
XX
XX KM Retrotransposon; genetic defect; cystic fibrosis; ds.
XX OS unidentified.
XX
XX PN US6150160-A.
XX PD 21-NOV-2000.
XX PF 28-APR-1997; 97US-00847844.
XX PR 16-NOV-1995; 95US-0006831P.
XX PR 15-NOV-1996; 96US-00749805.
XX PA (UTOO ) UNIV JOHNS HOPKINS.

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PA (UYPE-) UNIV PENNSYLVANIA.  
XX  
PI Moran JV, Dombroski BA, Kazazian HH, Boeke JD;  
XX  
DR WPI; 2001-060015/07.  
XX  
PT DNAC comprising a promoter P and an L1 cassette sequence having a core  
PT retrotransposon element, useful for random insertion of a heterologous or  
PT homologous DNA sequence into a cell genome and for correcting genetic  
PT defects.  
XX  
PS Disclosure; Fig 14; 87pp; English.  
XX  
CC The present invention relates to DNA for a promoter and an L1 cassette  
CC sequence having a core retrotransposon element. The invention is useful  
CC for random insertion of a heterologous or homologous DNA sequence into a  
CC cell genome, and for correction of a genetic defect in the cell into  
CC which the insertion is made. Genetic defects which may be corrected  
CC includes cystic fibrosis, mutations in the dystrophin gene, genetic  
CC defects associated with blood clotting and other genetic defects  
XX  
SQ Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 15.6; DB 1; Length 22;  
Best Local Similarity 81.8%; Pred. No. 2.7e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0  
QY 1516 AATTAAAAAAAAAAGTAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAAAAAA 22  
RESULT 189  
ACCT4147/C  
ID ACC74147 standard; DNA; 22 BP.  
XX  
AC ACC74147;  
XX  
DT 11-JUL-2003 (first entry)  
XX  
DE Forward primer for detecting murine TLR6 expression.  
XX  
KW Mouse; immunomodulator; antibacterial; immunosuppressive; CSF-1;  
KW colony stimulating factor-1; septic shock; TLR; toll-like receptor;  
KW interleukin-12; IL-12; HPRV; hypoxanthine phosphoribosyl transferase;  
XX PCR; primer; ss.  
XX  
OS Mus sp.  
XX  
PN WO2003028752-A1.  
XX  
PD 10-APR-2003.  
XX  
PF 03-OCT-2002; 2002WO-AU001348.  
XX  
PR 03-OCT-2001; 2001AU-00008071.  
XX  
PA (UYQU ) UNIV QUEENSLAND.  
XX  
PI Hume DA, Sweet MJ, Stacey KJ, Seater DP;  
XX  
DR WPI; 2003-381587/36.  
XX  
PT Modulating an immune response in an animal, useful for the prophylactic  
PT or therapeutic treatment of bacterially-induced septic shock, by  
PT modulating colony stimulating factor-1 (CSF-1) activity in an animal.  
XX  
PS Example; Page 19; 58pp; English.  
XX  
CC The invention relates to modulating an immune response in an animal. The  
CC method of the invention comprises modulating colony stimulating factor-1  
CC (CSF-1) activity in order to modulate the immune response of the animal.  
CC Also disclosed is a pharmaceutical composition comprising a modulator of

CC CSF-1 activity and a pharmaceutical carrier. The method or the  
CC pharmaceutical composition is useful for the prophylactic or therapeutic  
CC treatment of bacterially-induced septic shock. The sequences given in  
CC records ACC74129-ACC74161 represent primers and probes used in an example  
CC from the invention to detect murine genes  
XX  
SQ Sequence 22 BP; 7 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.6; DB 1; Length 22;  
Best Local Similarity 81.8%; Pred. No. 2.7e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 1593 TGACTGCAGTTAGTCTCCGAG 1514  
DB 22 TGACTTCAGTCTCTCCGAG 1

RESULT 190  
ADFI2348  
ID ADFI2348 standard; DNA; 22 BP.  
XX  
AC ADFI2348;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE L1 retrotransposon endonuclease cleavage site seq id 94.  
XX  
KM gene therapy; insertional mutation; germ line specific promoter;  
KM mutation generation; transgenic animal; poly A element; non-LTR;  
KM retrotransposon; long terminal repeats; L1; EN domain; endonuclease;  
KM cleavage site; ds.  
XX  
OS Homo sapiens.  
XX  
PN US2003121063-A1.  
XX  
PD 26-JUN-2003.  
XX  
PF 09-AUG-2002; 2002US-00216122.  
XX  
PR 16-NOV-1995; 95US-0006831P.  
PR 15-NOV-1996; 96US-00749805.  
PR 28-APR-1997; 97US-00847844.  
PR 01-SEP-2000; 2000US-00653812.  
XX  
PA (UYPE-) UNIV PENNSYLVANIA.  
XX  
PI Kazazian HH, Ostertag E, Debernardinis R;  
XX  
DR WPI; 2003-863454/80.  
XX  
PT Creating an insertional mutation in the germ line of an animal, useful  
PT for generating a mutation in an offspring of an animal, comprises  
PT introducing into an animal a nucleic acid molecule comprising a germ line  
PT specific promoter.  
XX  
PS Example 2; SEQ ID NO 94; 102bp; English.  
XX  
CC The invention describes a method of creating an insertional mutation in  
CC the germ line of an animal by introducing into an animal a nucleic acid  
CC molecule comprising a germ line specific promoter. The method is useful  
CC for generating a mutation in an offspring of an animal, or for isolating  
CC a nucleic acid from a genome of an offspring of an animal. The method may  
CC also be used to correct genetic defects in animals, especially humans.  
CC The nucleic acid is useful for generating mutations in a cell for  
CC assessing the frequency with which selected cells under go insertional  
CC mutagenesis for the generation of transgenic animals. This sequence  
CC represents an exemplary cleavage site of the endonuclease encoded by  
CC human L1 retrotransposon EN domain.  
XX  
SQ Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.6; DB 1; Length 22;

Best Local Similarity 81.8%; Pred. No. 2.7e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Oy 1516 AATTAAAAAAGTAAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAAAAAA 22

RESULT 191  
ADQ25630/C  
ID ADQ25630 standard; cDNA; 22 BP.  
XX  
AC ADQ25630;  
XX  
DT 23-SEP-2004 (first entry)  
XX  
DE Junction-specific poly(A) cDNA primer.  
XX  
KM Cystic fibrosis; muscular dystrophy; diabetes; gene discovery;  
KM gene mapping; molecular haplotyping; agricultural research;  
KM prostate cancer; breast cancer; lung cancer; colon cancer;  
KM ovarian cancer; human; adenorectal carcinoma; primer; ss.  
XX  
OS Unidentified.  
XX  
PN US2004126770-A1.  
XX  
PD 01-JUL-2004.  
XX  
PF 31-DEC-2002; 2002US-00335573.  
XX  
PR 31-DEC-2002; 2002US-00335573.  
XX  
PA (KUMAR/) KUMAR G.  
XX  
PA (ABARZUA/) ABARZUA P.  
XX  
PI Kumar G, Abarzua P;  
XX  
DR WPI; 2004-499113/47.  
XX  
PF Amplifying RNA sequences, useful in detecting diseases or mutation,  
PF comprises synthesizing first strand cDNA, circularizing first strand  
PF cDNA, and replicating the circularized cDNA molecules by rolling circle  
PF replication.  
XX  
PS Disclosure; SEQ ID NO 6; 64bp; English.  
XX  
CC The present invention relates to composition and method for amplifying  
CC RNA sequences. The method involves synthesizing first strand cDNA  
CC molecules from RNA molecules, circularizing the first strand and  
CC replicating the circularized first strand cDNA molecules using rolling  
CC circle replication. The method is useful for producing nucleic acid  
CC molecules corresponding to RNA molecules in an RNA sample, for  
CC identifying or analysing and comparing RNA molecules and/or sequences  
CC expressed in different cells, tissues and/or samples. The invention is  
CC also useful in detecting disease (e.g. cystic fibrosis, muscular  
CC dystrophy or diabetes), mutation detection, gene discovery, gene mapping  
CC (molecular haplotyping), agricultural research, and assessment of  
CC predisposition for cancers, e.g. prostate, breast, lung, colon or ovarian  
CC cancer. The present sequence is a junction-specific cDNA primer. This  
CC sequence is used to illustrate the method of invention.  
XX  
SQ Sequence 22 BP; 0 A; 0 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.6; DB 1; Length 22;  
Best Local Similarity 81.8%; Pred. No. 2.7e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 1516 AATTAAAAAAGTAAAA 1537  
DB 22 AAAAAAAAAAAAAAAAAAAAAA 1

```

RESULT 192
AAK69796/C
ID   AAK69796 standard; RNA; 17 BP.
XX
XX   AAK69796;
XX
XX   28-JUL-1999 (first entry)
XX
DE   Human flt1 VEGF receptor hammerhead ribozyme substrate #1091.
XX
XX   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
XX   foetal liver kinase 1; ss.
XX
XX   Homo sapiens.
XX
XX   WO9715662-A2.
XX
XX   01-MAY-1997.
XX
XX   25-OCT-1996; 96WO-US017480.
XX
XX   26-OCT-1995; 95US-0005974P.
XX   11-JAN-1996; 96US-00584040.
XX
XX   (RIBO-) RIBOZYME PHARM INC.
XX   (CHIR ) CHIRON CORP.
XX
XX   Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX   WPI; 1997-259017/23.
XX
XX   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX   rheumatoid arthritis, etc., in a human patient.
XX
XX   Claim 4; Page 79; 218pp; English.
XX
XX   The present invention describes nucleic acid molecules which modulate the
XX   synthesis, expression and/or stability of a mRNA encoding 1 or more
XX   receptors of vascular endothelial growth factor (VEGF). A patient
XX   (preferably human) having a condition associated with the level of the
XX   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX   treated by administering the nucleic acid molecule or the expression
XX   vector to the patient. AAK67275 to AAK75752 represent specific examples
XX   of nucleic acid molecules from the present invention
XX
XX   Sequence 17 BP; 1 A; 2 C; 0 G; 0 T; 14 U; 0 Other;
SQ
Query Match      1.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 3.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY      1520 AAAAAAAAAAAGTAAA 1536
DB      17 AAAAAAAAAAAGTAGA 1

```

```

KW   hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW   gene expression modification; cancer; phosphorothioate; endonuclease;
KW   anticancer; breast cancer; endometrium cancer; ss.
XX
XX   Homo sapiens.
XX
XX   WO9954459-A2.
XX
XX   28-OCT-1999.
XX
XX   19-APR-1999; 99WO-US008547.
XX
XX   20-APR-1998; 98US-0082404P.
XX   23-JUN-1998; 98US-00103636.
XX
XX   (RIBO-) RIBOZYME PHARM INC.
XX
XX   Thompson JD, Beigelman L, Mcswiggen JA, Karpelsky A, Bellon L;
XX   Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;
XX   Matulic-Adamic J;
XX   WPI; 2000-013248/01.
XX
XX   New nucleic acids that interact, and optionally cleave, target sequences,
XX   used to treat cancer.
XX
XX   Claim 77; Page 79; 148pp; English.
XX
XX   The present invention describes nucleic acids (A) that interact stably
XX   with a target sequence and contain at least one phosphorodithioate
XX   link, having endonuclease activity. (A), and more generally any catalytic
XX   nucleic acid (A') that modulates expression of the oestrogen receptor
XX   gene, are used to treat cancer (particularly of breast or endometrium),
XX   in vivo or by transforming cells ex vivo and implanting created cells, or
XX   for other conditions associated with levels of oestrogen receptor.
XX   Because of the high selectivity for targeted RNA, (A) can also be used to
XX   correlate inhibition of gene expression with alterations in phenotype,
XX   particularly for identification of therapeutic targets, and as research
XX   reagents (for RNA, in the same way that restriction endonucleases are
XX   used with DNA). The combination of modifications in (A) improves
XX   resistance to nucleases, binding affinity and/or activity. AAK23503 to
XX   AAK4747 represent oestrogen receptor hammerhead ribozyme sequences, and
XX   AAK4748 to AAK25992 represent their corresponding target sequences.
XX   AAK25993 to AAK26105 represent oestrogen receptor hairpin ribozyme
XX   sequences, and AAK26107 to AAK26218 represent their corresponding target
XX   sequences. AAK26219 to AAK26271 represent other ribozyme sequences and
XX   antisense oligonucleotides used in the exemplification of the present
XX   invention
XX
XX   Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
SQ
Query Match      1.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 3.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY      1520 AAAAAAAAAAAGTAAA 1536
DB      17 AAAAAAAAAAAGTAGA 1

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RESULT 193
AAK25445/C
ID   AAK25445 standard; DNA; 17 BP.
XX
XX   AAK25445;
XX
XX   19-JUL-2000 (first entry)
XX
XX   Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1943.
XX
XX   Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
XX

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```

RESULT 194
AAK02226/C
ID   AAK02226 standard; DNA; 17 BP.
XX
XX   AAK02226;
XX
XX   16-FEB-2001 (first entry)
XX
XX   Hammerhead ribozyme substrate #521.
XX
XX   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
XX   interferon alpha; ss.
XX

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```
OS Homo sapiens.
XX
XX PN WO200061729-A2.
XX
XX PD 19-OCT-2000.
XX
XX PF 11-APR-2000; 2000WO-US009721.
XX
XX PR 12-APR-1999; 99US-0129390P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX P1 Blact L, Zwick M, Pavco P, Mcswiggen J;
XX
XX DR WPI; 2000-647423/62.
XX
XX PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
XX useful for producing e.g. granulocyte colony stimulating factor protein,
XX interferon alpha and erythropoietin.
XX
XX PS Claim 37; Page 67; 164pp; English.
XX
XX CC The present invention relates to enzymatic and antisense nucleic acid
XX molecules that act as inhibitors of the expression of repressor genes
XX encoding the TR2 Orphan receptor, EAK3/COP-1, the GATA transcription
XX factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).
XX CC Inhibition of the repressors removes prevents inhibition (and
XX consequently increases expression of) genes involved in the production of
XX erythropoietin, granulocyte colony stimulating factor protein and
XX interferon alpha
XX
XX SQ Sequence 17 BP; 0 A; 8 C; 8 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 3.8e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 646 GCCGTGCCGAGCCGCC 662
DB 17 GCCGGCGCGAGCCGCC 1
XX
XX RESULT 195
XX ABZ65528
XX ID ABZ65528 standard; RNA; 17 BP.
XX
XX AC ABZ65528;
XX
XX DT 21-MAR-2003 (first entry)
XX
XX DE Human HER2 DNAzyme substrate #985.
XX
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX anti-rheumatic; cancer; AIDS; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200297114-A2.
XX
XX PD 05-DEC-2002.
XX
XX PF 29-MAY-2002; 2002WO-US016840.
XX
XX PR 29-MAY-2001; 2001US-0294140P.
XX
XX PR 06-JUN-2001; 2001US-0296249P.
XX
XX PR 10-SEP-2001; 2001US-0318471P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX P1 Mcswiggen J;
XX
XX DR WPI; 2003-140484/13.
```

```
XX
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX treating cancer, modulates the expression of a nucleic acid encoding
XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX PS Claim 4; Page 152; 185pp; English.
XX
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX acid molecule or an enzymatic nucleic acid molecule, that modulates
XX expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX rheumatic activity. The nucleic acid molecules are useful for reducing
XX HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX also useful for treating breast, ovarian, colorectal, lung, prostate,
XX bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ65520 - ABZ65524,
XX ABZ65530 - ABZ65585 represent substrate/target sequences for the human
XX ribozymes of the invention
XX
XX SQ Sequence 17 BP; 1 A; 0 C; 2 G; 0 T; 14 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 17.6%; Pred. No. 3.8e+02;
XX Matches 3; Conservative 13; Mismatches 1; Indels 0; Gaps 0;
OY 1248 TTGTGTTTGTGTTTAA 1264
DB 1 UUGUGUUUGUUUUUA 17
XX
XX RESULT 196
XX ACD61808
XX ID ACD61808 standard; RNA; 17 BP.
XX
XX AC ACD61808;
XX
XX DT 23-SEP-2003 (first entry)
XX
XX DE HCV minus strand DNAzyme substrate sequence #231.
XX
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zincyme;
XX ambezyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virocid; antiinflammatory; substrate; ss.
XX
XX OS Hepatitis C virus.
XX
XX PN WO200281494-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 26-MAR-2002; 2002WO-US009187.
XX
XX PR 26-MAR-2001; 2001US-00817879.
XX
XX PR 08-JUN-2001; 2001US-00874748.
XX
XX PR 08-JUN-2001; 2001US-0296876P.
XX
XX PR 24-OCT-2001; 2001US-0335059P.
XX
XX PR 05-DEC-2001; 2001US-0337055P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX P1 (BLAT/) BLATT L.
XX
XX PA (MACE/) MACEJAK D.
XX
XX PA (MCSW/) MCSWIGGEN J.
XX
XX PA (MORR/) MORRISSEY D.
XX
XX PA (PAVC/) PAVCO P.
XX
XX PA (LEEP/) LEE P.
XX
XX PA (DRAP/) DRAPER K.
XX
XX PA (ROBE/) ROBERTS E.
```

Pt	Blatt L,	Maejck D.	Meswigen J.	Morrissey D.	Pavco P.	Lee P;
Xx	Draper K,	Roberts E;				
Df	WPI; 2003-229207/22.					
Xx						
Pt	Novel compound useful for treating cirrhosis, liver failure,					
Pt	hepatocellular carcinoma, or condition associated with hepatitis C virus					
Pt	infection.					
Ps	Claim 1; Page 279; 387pp; English.					
Xx						
Cc	The present invention relates to nucleic acid molecules which modulate					
Cc	the synthesis, expression and/or stability of Hepatitis C virus (HCV) or					
Cc	Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense					
Cc	and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,					
Cc	ribozymes, zincymes, ambryzemes, and G-cleaver ribozymes. Also disclosed					
Cc	are nucleic acid decoy molecules and aptamers that bind to HBV reverse					
Cc	transcriptase and/or HBV reverse transcriptase primer sequences, as well					
Cc	as oligonucleotides that specifically bind the Enhancer I region of HBV					
Cc	DNA. The nucleic acids may be used to modulate the expression of HBV					
Cc	genes and HBV viral replication. Also disclosed is a method for screening					
Cc	compounds and/or potential therapies directed against HBV, and compounds					
Cc	that modulate the expression and/or replication of HCV. The compounds and					
Cc	methods of the invention are useful for the treatment of degenerative and					
Cc	disease states related to HBV and HCV infection, hepatocelluar and gene					
Cc	expression such as cirrhosis, liver failure, and hepatocellular					
Cc	carcinoma. The present sequence represents a substrate for one of the HCV					
Cc	DNazyme or minus strand DNazyme sequences disclosed in the present					
Cc	invention					
Sq	Sequence 17 BP; 1 A; 8 C; 7 G; 0 T; 1 U; 0 Other;					
Qy	Query Match                    1.1%; Score 15.4; DB 1; Length 17; Best Local Similarity      88.2%; Pred. No. 3.8e+02; Matches     15; Conservative     1; Mismatches       1; Indels       0; Gaps       0					
Db	960 CTCGCGGGCCCCCGCG 976   :                 1 CUCGGCGGCACCGCGC 17					
<hr/>						
RESULT 197						
ID	ADH70550/C					
XX	ADH70550 standard; DNA; 17 BP.					
AC	ADH70550;					
DT						
XT	25-MAR-2004 (first entry)					
DE	Human Vbeta gene repeat sequence #340.					
XX						
KM	human, T-cell associated disease; Vbeta; autoimmune disease;					
KM	degenerative nervous system disease; graft versus host disease;					
KM	hypersensitivity disease; infectious disease; neoplastic disease;					
KM	Addison's disease; atrophic gastritis;					
KM	degenerative nervous system disease; multiple sclerosis;					
KM	Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;					
KM	allergy; type II hypersensitivity; Goodpasture's syndrome;					
KM	type IV hypersensitivity; leprosy; infectious disease; viral infection;					
KM	HIV; fungal infection; Candida; parasitic infection; schistosom;					
KM	filariis; bacterial infection; Mycobacterium; neoplastic disease;					
KM	lymphoproliferative disease; leukemia; lymphoma; cancer; brain cancer;					
KM	breast cancer; de.					
OS	Homo sapiens.					
PN	US2002150891-A1.					
PD	17-OCT-2002.					
PF	05-MAR-1999; 99US-00263959.					
XX						

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PR 19-SEP-1994; 94US-00309335.
XX 19-SEP-1995; 95US-00531241.
PR
XX (HOOD/) HOOD L E.
PA (ROME/) ROWEN L.
PI Hood LE, Rowen L;
XX
XX WPI: 2004-059052/06.
XX
XX Kit for diagnosing and treating T-cell associated diseases e.g.
XX autoimmune, degenerative nervous system and infectious disease, comprises
XX nucleic acid primers specifically priming and allowing amplification of a
XX Vbeta gene.
XX
XX Disclosure; SEQ ID NO 744; 164pp; English.
XX
XX The invention relates to a kit for diagnosing and treating T-cell
XX associated diseases which comprises a panel of nucleic acid primers
XX specifically priming and allowing amplification of each Vbeta gene,
XX VbetatRNA or cDNA. The kit is useful for diagnosing organ transplant
XX rejection and diagnosing and treating T-cell associated diseases
XX including autoimmune diseases, degenerative nervous system diseases,
XX graft versus host disease, hypersensitivity diseases, infectious diseases
XX and neoplastic diseases. Autoimmune diseases include Addison's disease,
XX atrophic gastritis. Degenerative nervous system diseases include multiple
XX sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
XX I hypersensitivities such as contact with allergens that lead to
XX allergies, Type II hypersensitivities such as those present in
XX Goodpasture's syndrome and Type IV hypersensitivities such as those
XX manifested in leprosy. Infectious diseases include viral infections
XX caused by viruses such as HIV, fungal infections such as those caused by
XX the yeast genus Candida, parasitic infections such as those caused by
XX schistosomes, filaria and bacterial infections such as those caused by
XX Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
XX such as leukemias, lymphomas and cancers such as cancer of the brain,
XX breast. The present sequence represents a Vbeta gene repeat sequence.
XX
XX Sequence 17 BP; 15 A; 0 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 3.8e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1302 TCTATTTTTTTTATT 1318
XX 17 TTTATTTTTTTTATT 1
XX
XX RESULT 198
XX AD185262
XX ID AD185262 standard; RNA; 17 BP.
XX
XX AD185262;
XX
XX 03-JUN-2004 (first entry)
XX
XX HCV DNAzyme substrate sequence #2508.
XX
XX 89; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX HCV infection; type I interferon; DNAzyme.
XX
XX Hepatitis C virus.
XX
XX US2003125270-A1.
XX
XX 03-JUL-2003.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX (BLAT/) BLATT L.
XX

```

PA (MCSW/) MCSWIGGEN J.  
 PA (ROBE/) ROBERTS E.  
 PA (PAVC/) PAVCO P A.  
 PA (MACE/) MACEJACK D.  
 XX  
 PI Blact L, Mcwigen J, Roberts E, Pavco PA, Macejack D;  
 XX  
 DR WPI; 2004-031273/03.  
 XX  
 PT Enzymatic nucleic acid molecules which specifically cleave RNA derived  
 PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
 PT especially in combination with type I interferon therapy.  
 XX  
 PS Claim 1; SEQ ID NO 2508; 198bp; English.  
 XX  
 CC The invention relates to an enzymatic nucleic acid molecule which  
 CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
 CC the binding arms of the enzymatic nucleic acid molecule comprises  
 CC sequences complementary to any of the defined substrate sequences given  
 CC in the specification. The nucleic acid molecule may be administered for  
 CC the treatment of HCV infections, especially in combination with type I  
 CC interferons. The present sequence represents a HCV DNAzyme substrate  
 CC sequence.  
 XX  
 SQ Sequence 17 BP; 1 A; 8 C; 7 G; 0 T; 1 U; 0 Other;  
 XX  
 Query Match 1.1%; Score 15.4; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 3.8e+02;  
 Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 OY 960 CTCGCGCGCGCCCGCGCG 976  
 Db 1 CUCGCGCGCGCACGCGCG 17  
 XX  
 RESULT 199  
 AAQ20109/c  
 ID AAQ20109 standard; DNA; 18 BP.  
 XX  
 AC AAQ20109;  
 XX  
 DT 01-APR-1992 (first entry)  
 XX  
 DE Cross-linking oligomer 943 to target human TNF Receptor mRNA.  
 XX  
 KW deoxyribonucleic acid; major groove; ethan amino group;  
 KW tumour necrosis factor; receptor; messenger RNA; aziridinylcytosine;  
 KW cross-linking group; ss.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FH modified\_base 5  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
 FT modified\_base 18  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "N4N4-ethanocytosine"  
 XX  
 XX WO9118997-A.  
 XX  
 XX PD 12-DEC-1991.  
 XX  
 XX PF 25-MAY-1990; 90US-00529346.  
 XX  
 XX PR 25-MAY-1990; 90US-00529346.  
 XX  
 XX PR 14-JAN-1991; 91US-00640654.  
 XX  
 XX (GILE-) GILEAD SCIE INC.  
 XX  
 XX PI Matteucci MD, Krawczyk S;

XX  
 DR WPI; 1992-007480/01.  
 XX  
 PT New sequence-specific non-photo-activated crosslinking agents - bind to  
 PT the major groove of duplex DNA and are esp. useful for treating latent  
 PT infections e.g. HIV.  
 XX  
 PS Example 4; Page 27; 42pp; English.  
 XX  
 CC The oligomer was designed to target human TNF receptor mRNA beginning at  
 CC nucleotide 2354 and to covalently cross-link to the target via the N4N4-  
 CC ethanocytosine group. See also AAQ20108  
 XX  
 SQ Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;  
 XX  
 Query Match 1.1%; Score 15.4; DB 1; Length 18;  
 Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 1521 AAAAAAAAAAGTAAA 1537  
 Db 17 AAAAAAAAAAAATAAA 1  
 XX  
 RESULT 200  
 AAQ20108/c  
 ID AAQ20108 standard; DNA; 18 BP.  
 XX  
 AC AAQ20108;  
 XX  
 DT 01-APR-1992 (first entry)  
 XX  
 DE Cross-linking oligomer 942 to target human TNF Receptor mRNA.  
 XX  
 KW deoxyribonucleic acid; major groove; ethan amino group;  
 KW tumour necrosis factor; receptor; messenger RNA; aziridinylcytosine;  
 KW cross-linking group; ss.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FH modified\_base 5  
 FT /\*tag= a  
 FT /mod\_base= m5C  
 FT modified\_base 18  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "N4N4-ethanocytosine"  
 XX  
 XX WO9118997-A.  
 XX  
 XX PD 12-DEC-1991.  
 XX  
 XX PF 25-MAY-1990; 90US-00529346.  
 XX  
 XX PR 25-MAY-1990; 90US-00529346.  
 XX  
 XX PR 14-JAN-1991; 91US-00640654.  
 XX  
 XX (GILE-) GILEAD SCIE INC.  
 XX  
 XX PI Matteucci MD, Krawczyk S;  
 XX  
 XX DR WPI; 1992-007480/01.  
 XX  
 PT New sequence-specific non-photo-activated crosslinking agents - bind to  
 PT the major groove of duplex DNA and are esp. useful for treating latent  
 PT infections e.g. HIV.  
 XX  
 PS Example 4; Page 27; 42pp; English.  
 XX  
 CC The oligomer was designed to target human TNF receptor mRNA beginning at  
 CC nucleotide 2354 and to covalently cross-link to the target via the N4N4-  
 CC ethanocytosine group. See also AAQ20109



XX SQ Sequence 18 BP; 0 A; 2 C; 0 G; 16 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.4; DB 1; Length 18;  
 Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 1520 AAAAAAAAAAGTAAA 1536  
 |||||  
 17 AAAAAAAAAAGAAA 1  
 |||||  
 RESULT 201  
 AAQ30448/C  
 ID AAQ30448 standard; DNA; 18 BP.  
 XX AC AAQ30448;  
 XX DT 25-MAR-2003 (revised)  
 DT 07-DEC-1992 (first entry)  
 XX OLIGOMER TNFR943 for forming triplex with HUMNFR target duplex.  
 DE Human tumour necrosis factor receptor mRNA; AIDS; modified; HIV; RSV;  
 KM HPV; malignancy; hepatitis; inflammation; ss.  
 XX OS Synthetic.  
 XX FH Key Location/Qualifiers  
 FT modified\_base 5  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "N6 methyl-8-oxo-2' deoxyadenine"  
 FT modified\_base 18  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= N4 N4 ethanocytosine"  
 XX PN WO9209705-A1.  
 XX PD 11-JUN-1992.  
 XX PF 25-NOV-1991; 91WO-US008811.  
 XX PR 23-NOV-1990; 90US-00617907.  
 PR 18-JAN-1991; 91US-00643382.  
 PR 08-APR-1991; 91US-00683420.  
 PR 17-APR-1991; 91US-00686544.  
 PR 17-APR-1991; 91US-00686546.  
 PR 17-APR-1991; 91US-00686547.  
 PR 27-SEP-1991; 91US-00766733.  
 XX PA (GILEAD) GILEAD SCI INC.  
 XX PI Froehler B, Krawczyk S, Matteucci MD, Milligan J;  
 XX WPI; 1992-217083/26.  
 XX DR New oligomers contg. modified bases - which form a triplex with G-C  
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,  
 PT herpes malignancy and inflammation.  
 XX PS Claim 12; Page 72; 77pp; English.  
 XX The synthetic oligomer is capable of forming a triplex at physiological  
 CC pH with a purine rich target sequence by coupling into the major groove  
 CC of the duplex. The specific target sequence of this oligomer is the human  
 CC tumour necrosis factor receptor mRNA beginning at nucleotide 2354 contg.  
 CC a purine rich sequence concd. on one strand of the duplex. The oligomer,  
 CC and others like it are useful in diagnosis and therapy of diseases  
 CC characterised by specific DNA duplex targets, e.g. HPV, HER, HIV,  
 CC hepatitis B, herpes, malignant tumours and inflammation. The triple  
 CC helices form under mild conditions thus assays may be carried out without

CC subjecting the test specimen to harsh conditions. See also AAQ25452-25501  
 CC and AAQ30226-447. (Updated on 25-MAR-2003 to correct PN field.) (Updated  
 CC on 25-MAR-2003 to correct PD field.)  
 XX SQ Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.4; DB 1; Length 18;  
 Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 1521 AAAAAAAAAAGTAAA 1537  
 |||||  
 17 AAAAAAAAAAGTAAA 1  
 |||||  
 RESULT 202  
 AAQ30447/C  
 ID AAQ30447 standard; DNA; 18 BP.  
 XX AC AAQ30447;  
 XX DT 25-MAR-2003 (revised)  
 DT 07-DEC-1992 (first entry)  
 XX OLIGOMER TNFR942 for forming triplex with HUMNFR target duplex.  
 DE Human tumour necrosis factor receptor mRNA; AIDS; modified; HIV; RSV;  
 KM HPV; malignancy; hepatitis; inflammation; ss.  
 XX OS Synthetic.  
 XX FH Key Location/Qualifiers  
 FT modified\_base 5  
 FT /tag= a  
 FT /mod\_base= m5c  
 FT modified\_base 18  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= N4 N4 ethanocytosine"  
 XX PN WO9209705-A1.  
 XX PD 11-JUN-1992.  
 XX PF 25-NOV-1991; 91WO-US008811.  
 XX PR 23-NOV-1990; 90US-00617907.  
 PR 18-JAN-1991; 91US-00643382.  
 PR 08-APR-1991; 91US-00683420.  
 PR 17-APR-1991; 91US-00686544.  
 PR 17-APR-1991; 91US-00686546.  
 PR 17-APR-1991; 91US-00686547.  
 PR 27-SEP-1991; 91US-00766733.  
 XX PA (GILEAD) GILEAD SCI INC.  
 XX PI Froehler B, Krawczyk S, Matteucci MD, Milligan J;  
 XX WPI; 1992-217083/26.  
 XX DR New oligomers contg. modified bases - which form a triplex with G-C  
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,  
 PT herpes malignancy and inflammation.  
 XX PS Claim 12; Page 72; 77pp; English.  
 XX The synthetic oligomer is capable of forming a triplex at physiological  
 CC pH with a purine rich target sequence by coupling into the major groove  
 CC of the duplex. The specific target sequence of this oligomer is the human  
 CC tumour necrosis factor receptor mRNA beginning at nucleotide 2354 contg.  
 CC a purine rich sequence concd. on one strand of the duplex. The oligomer,  
 CC and others like it are useful in diagnosis and therapy of diseases  
 CC characterised by specific DNA duplex targets, e.g. HPV, HER, HIV,

CC hepatitis B, herpes, malignant tumours and inflammation. The triple  
CC helices form under mild conditions thus assays may be carried out without  
CC subjecting the test specimen to harsh conditions. See also AAQ25452-25501  
CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.) (Updated  
CC on 25-MAR-2003 to correct PD field.)

XX Sequence 18 BP; 0 A; 2 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.4; DB 1; Length 18;  
Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAA 1536  
DB 17 AAAAAAAAAAAGAAA 1

## RESULT 203

AAZ91373  
ID AAZ91373 standard; DNA; 18 BP.

AC AAZ91373;

DT 22-MAY-2000 (first entry)

XX Human PTEN phosphorothioate antisense oligonucleotide #29539.

XX Human; PTEN; MMAC1; TEPI; phosphorothioate; antisense oligonucleotide;

KW inhibition; protein phosphatase; tumour; diagnosis; inflammation;  
KW anticancer; anti-inflammatory; anti-infective; infection; ss.

OS Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..18  
FT /\*tag= a  
FT /note= "phosphorothioate linkages"

XX US62020199-A.

XX 01-FEB-2000.

XX 21-JUL-1999; 99US-00358381.

XX 21-JUL-1999; 99US-00358381.

XX (ISIS-) ISIS PHARM INC.

PA Monia BP, Cowseert LM;

DR WPI; 2000-181363/16.

PT New antisense compounds useful for treating, preventing or diagnosing  
PT e.g. tumors or inflammation, are targeted to the human dual specificity  
PT protein phosphatase (PTEN) sequence.

XX Claim 16; Col 40; 32pp; English.

CC The present invention describes phosphorothioate antisense  
CC oligonucleotides that are targeted to the 3'-untranslated region (UTR) of  
CC the sequence encoding a human dual specificity protein phosphatase  
CC designated PTEN (also known as MMAC1 and TEPI), and hybridise  
CC specifically to the human PTEN nucleotide sequence given in AAZ91361. The  
CC antisense oligonucleotides have anticancer, anti-inflammatory and anti-  
CC infective activities. The phosphorothioate antisense oligonucleotides can  
CC be used for diagnosis, treatment and prevention of PTEN-related diseases,  
CC e.g. infections, inflammation and tumours. The present sequence  
CC represents a phosphorothioate antisense oligonucleotide for human PTEN,  
CC from the present invention

XX Sequence 18 BP; 1 A; 7 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 633 GGGAGTGGCGCCCGC 649

DB 1 GGGAGTGGCGCCCGC 17

## RESULT 204

AAI3999  
ID AAI3999 standard; DNA; 18 BP.

AC AAI3999;

DT 18-DEC-2001 (first entry)

XX Human PTEN antisense oligonucleotide ISIS 29539.

XX Human; PTEN; MMAC1; TEPI; protein phosphatase; antisense; ss;

KW antiinflammatory; cytostatic; antidiabetic; antidiabetic; infection;  
KW inflammation; tumour; diabetes; insulin resistance; insulin sensitivity;  
KW triglyceride control; cholesterol control; ISIS 29539.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified\_base 1..18  
FT /\*tag= a  
FT /note= "Phosphorothioate backbone"

FT modified\_base 1..18

FT /\*tag= b  
FT /note= "Optionally 2'-methoxyethyl residue (2'-MOE). When  
FT 1-4 are 2'-MOE all cytosines in this region are 5-  
FT methylcytosines"

FT modified\_base 15..18

FT /\*tag= c  
FT /note= "Optionally 2'-methoxyethyl residue (2'-MOE). When  
FT 15-18 are 2'-MOE all cytosines in this region are 5-  
FT methylcytosines"

XX US6284538-B1.

XX 04-SEP-2001.

XX 24-MAY-2000; 2000US-00577902.

XX 21-JUL-1999; 99US-00358381.

XX 14-DEC-1999; 99WO-US029594.

XX (ISIS-) ISIS PHARM INC.

PA Monia BP, Cowseert LM, McKay R;

DR WPI; 2001-588976/66.

PT New antisense oligonucleotides targeting nucleic acids encoding PTEN,  
PT useful for treating diabetes, increasing insulin sensitivity, or  
PT decreasing insulin resistance, blood triglyceride or cholesterol levels  
PT in a diabetic animal.

XX Claim 1; Col 41; 38pp; English.

CC The invention relates to a compound targeted to a nucleic acid encoding  
CC PTEN (a dual specificity protein phosphatase), where the compound is an  
CC antisense oligonucleotide. The antisense oligonucleotides are useful in  
CC modulating the function of nucleic acids encoding PTEN, ultimately  
CC modulating the amount of PTEN produced. The antisense compounds can be used  
CC as diagnostics, therapeutics, prophylactics (e.g. to prevent or delay  
CC infection, inflammation or tumour formation), and as research agents and  
CC kits. The antisense compounds are also useful in treating diabetes,  
CC decreasing insulin resistance, increasing insulin sensitivity and  
CC decreasing blood triglyceride or cholesterol levels in a diabetic animal.

CC The present sequence is an antisense oligonucleotide targeting the DNA  
CC encoding PTEN (also known as MMAC1/TEP1)  
XX  
SQ Sequence 18 BP; 1 A; 7 C; 9 G; 1 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.4; DB 1; Length 18;  
Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
OY 633 GCGAGCTGCGCCGCCG 649  
DB 1 GCGAGCTGCGCCGCCG 17  
RESULT 205  
AAH19624  
ID AAH19624 standard; DNA; 18 BP.  
XX  
AC AAH19624;  
XX  
DT 31-JUN-2001 (first entry)  
XX  
DE Complementary oligo of sequence containing a mixture of CAG/CAA codons.  
XX  
KW Polyglutamine region; polypeptide aggregation; aggregation disruption;  
KW Huntington's disease; Alzheimer's disease; Parkinson's disease;  
KW spinocerebellar ataxia; multiple myeloma; amyloidosis; anticonvulsant;  
KW spongiform encephalopathy; neuroprotective; nootropic; antiparkinsonian;  
KW ss.  
XX  
OS Synthetic.  
XX  
PN WO200123412-A2.  
XX  
PD 05-APR-2001.  
XX  
PF 27-SEP-2000; 2000MO-US041008.  
XX  
PR 27-SEP-1999; 99US-00405048.  
XX  
PA (MASI ) MASSACHUSETTS INST TECHNOLOGY.  
XX  
PI Housman DE, Preisinger EA, Kazantsev AG;  
XX  
DR WPI; 2001-300097/31.  
XX  
PT Screening for agents which disrupt aggregation of polypeptides for  
PT treating aggregation-associated disorders e.g. Alzheimer's disease, by  
PT using aggregation-disposed polypeptides or cell expressing the  
PT polypeptides.  
XX  
PS Example 1; Page 25; 42pp; English.  
XX  
CC The present sequence was used to generate a polypeptide with extended  
CC polyglutamine regions. This was performed in an example illustrating a  
CC method for identifying a compound which disrupts polypeptide aggregation.  
CC The method is carried out using a cell which has been genetically  
CC modified to express aggregation-disposed polypeptides, or using purified  
CC aggregation-disposed polypeptides. The compounds identified by this  
CC method are useful for treating disorders associated with such polypeptide  
CC aggregation, including Huntington's disease, Alzheimer's disease,  
CC Parkinson's disease, spinocerebellar ataxia, multiple myeloma,  
CC amyloidosis, and spongiform encephalopathies like Creutzfeldt-Jakob  
CC disease and kuru in humans. The present sequence was annealed to its  
CC complement to generate double stranded duplex DNA with trinucleotide  
CC extensions  
XX  
SQ Sequence 18 BP; 0 A; 3 C; 6 G; 9 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.4; DB 1; Length 18;  
Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 723 TTTCGCTGCTGCTG 739  
DB 2 TTTCGCTGCTGCTG 18  
RESULT 206  
AAD40034  
ID AAD40034 standard; DNA; 18 BP.  
XX  
AC AAD40034;  
XX  
DT 22-OCT-2002 (first entry)  
XX  
DE Human PTEN antisense oligonucleotide, ISIS 29579.  
XX  
KW Human; phosphoinositide phosphatase; PTEN; liver; kidney; cholesterol;  
KW metabolic disease; diabetes; hyperproliferative; glucose; insulin; PDECK;  
KW triglyceride; antisense gene therapy; cytosolic; adipose cell;  
KW antiproliferative; antisense; phosphorochloate backbone; ss.  
XX  
OS Homo sapiens.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..18  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorochloate backbone"  
FT modified\_base 1..4  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 15..18  
FT /\*tag= C  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 15  
FT /\*tag= d  
FT /mod\_base= m5c  
FT modified\_base 16  
FT /\*tag= e  
FT /mod\_base= m5c  
FT modified\_base 18  
FT /\*tag= f  
FT /mod\_base= m5c  
XX  
PN US2002058638-A1.  
XX  
PD 16-MAY-2002.  
XX  
PF 11-JUN-2001; 2001US-00878582.  
XX  
PR 21-JUN-1999; 99US-00358381.  
PR 14-DEC-1999; 99MO-US029594.  
PR 24-MAY-2000; 2000US-00577902.  
XX  
PA (MONI/) MONIA B P.  
PA (CONS/) COMSEKT L M.  
PA (MCKA/) MCKAY R.  
PI Monia BP, Cowser LM, Mckay R;  
XX  
DR WPI; 2002-479187/51.  
XX  
CC New compound, preferably an antisense oligonucleotide, that hybridizes  
CC PT and inhibits the expression of phosphoinositide phosphatase (PTEN), for  
CC treating diseases such as diabetes, or a hyperproliferative condition.  
XX  
PS Claim 7; Page 31; 39pp; English.  
XX  
CC The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of phosphoinositide phosphatase (PTEN). The  
CC antisense compound is used to inhibit the expression of PTEN in cells or

CC tissues, preferably human, or rodent, such as mouse or rat, liver, kidney  
CC or adipose cells or tissues. It is used to treat a disease or condition  
CC associated with PREN, such as a metabolic disease or condition,  
CC preferably diabetes, especially Type 2 diabetes, or a hyperproliferative  
CC condition. It is also used to decrease blood glucose or insulin levels in  
CC an animal, preferably a diabetic human or rodent. It is also used to  
CC inhibit expression of PEPCK in cells or tissues. It is also used to  
CC decrease insulin resistance, or increase insulin sensitivity, in an  
CC animal, preferably a diabetic human or rodent. It is used to decrease  
CC blood triglyceride or cholesterol levels in an animal, preferably a  
CC diabetic human or rodent. It is also used in antisense gene therapy. The  
CC present sequence is an antisense oligonucleotide targeted to human PREN  
CC DNA.

XX Sequence 18 BP; 1 A; 7 C; 9 G; 1 T; 0 U; 0 Other;  
SQ

Query Match 1.1%; Score 15.4; DB 1; Length 18;  
Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 633 GCGAGGTGGCGCCGCCG 649  
| | | | | | | | | | | | | | | | | |  
Db 1 GCGAGGTGGCGCCGCCG 17

RESULT 207  
ABK1199  
ID ABK1199 standard; DNA; 18 BP.  
XX  
AC ABK1199;  
XX  
DT 05-JUN-2002 (first entry)  
XX  
DE Oligonucleotide #2 used to generate DNA with trinucleotide extensions.  
XX  
KW Inhibition of protein-protein interaction; Alzheimer's disease;  
KW polyglutamine-containing transcription factor; hexamerisation of p53;  
KW homodimerisation of Jun; expanded trinucleotide repeat; CAG repeat;  
KW Huntington's disease; HD; primate and bulbar muscular atrophy; SBMA;  
KW dentatorubral-pallidoluysian atrophy; spinocerebellar ataxia type 1;  
KW spinocerebellar ataxia type 2; spinocerebellar ataxia type 6;  
KW spinocerebellar ataxia type 7; Machado-Joseph disease; MJD/SCA3;  
KW neurotropic; anticonvulsant; cerebroprotective; neuroprotective; ss.  
XX  
OS Synthetic.  
XX  
OS  
XX  
PN WO200216644-A1.  
XX  
PD 28-FEB-2002.  
XX  
PF 20-AUG-2001; 2001WO-US026097.  
XX  
PR 18-AUG-2000; 2000US-0226502P.  
XX  
PA (MASI ) MASSACHUSETTS INST TECHNOLOGY.  
XX  
PI Kazantsev A, Thompson L, Housman DE;  
XX  
DR WPI; 2002-280948/32.  
XX  
PT Novel agent for inhibiting protein-protein interaction useful to treat  
PT Alzheimer's disease, has two domains which bind first, second proteins  
PT with seven consecutive glutamine residues and a domain separating two  
PT domains.  
XX  
PS Disclosure; Page 8; 40pp; English.  
XX  
CC The present invention relates to therapeutic agents comprising a first  
CC domain (D1) that binds a protein having at least seven consecutive  
CC glutamine (Glu) residues, a second domain (D2) that binds another protein  
CC having at least 7 consecutive Glu residues, and a third domain (D3) that  
CC separates D1 from D2. The therapeutic agents of the invention are useful  
CC for inhibiting protein-protein interactions (e.g. aggregation,

CC dimerisation or other physiologically significant association), and can  
CC be used for treating Alzheimer's disease, and disorders in which  
CC polyglutamine-containing transcription factors or coactivators are  
CC desirably active (e.g. disorders associated with homodimerisation of Jun  
CC or hexamerisation of p53). The therapeutic agents can also be used to  
CC treat various disorders, including those associated with expanded  
CC trinucleotide (CAG) repeats. For example such disorders can include  
CC Huntington's disease (HD), primate and bulbar muscular atrophy (SBMA),  
CC dentatorubral-pallidoluysian atrophy, spinocerebellar ataxia type 1, type  
CC 2, type 6 or type 7, or Machado-Joseph disease (MJD/SCA3). The present  
CC sequence represents an oligonucleotide used to generate double stranded  
CC DNA with trinucleotide extensions

XX Sequence 18 BP; 0 A; 3 C; 6 G; 9 T; 0 U; 0 Other;  
SQ

Query Match 1.1%; Score 15.4; DB 1; Length 18;  
Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 723 TTTTGTCTGTGCTGCTG 739  
| | | | | | | | | | | | | | | | | |  
Db 2 TTTTGTCTGTGCTGCTG 18

RESULT 208  
ADD2026  
ID ADD2026 standard; DNA; 18 BP.  
XX  
AC ADD2026;  
XX  
DT 15-JAN-2004 (first entry)  
XX  
DE Oreochromis niloticus microsatellite primer SEQ ID NO:861.  
XX  
KW single nucleotide polymorphism; SNP; fish; Salmo salar;  
KW Oreochromis niloticus; Atlantic halibut; microsatellite; cod;  
KW polymorphic site; seabass; salmonidae; Tilapia; rainbow trout; halibut;  
KW detection; primer; ss.  
XX  
OS Synthetic.  
OS Oreochromis niloticus.  
XX  
PN WO2003060160-A2.  
XX  
PD 24-JUL-2003.  
XX  
PF 17-JAN-2003; 2003WO-IB000112.  
XX  
PR 18-JAN-2002; 2002US-0349950P.  
XX  
PR 16-AUG-2002; 2002US-0404200P.  
XX  
PA (GENO-) GENOMAR ASA.  
XX  
PI Lie O, Sletten A, Hoyum M, Langaas F;  
XX  
DR WPI; 2003-627388/59.  
XX  
PT Novel isolated nucleic acid molecule comprising single nucleotide  
PT polymorphism associated with fish, useful for forming PCR primers which  
PT are used for detecting single nucleotide polymorphisms in fish nucleic  
PT acids.  
XX  
PS Claim 18; SEQ ID NO 861; 23pp; English.  
XX  
CC The present invention describes an isolated nucleic acid (I) comprising a  
CC single nucleotide polymorphism (SNP) chosen from: (i) a nucleic acid of  
CC Salmo salar SNPs, Oreochromis niloticus SNPs or Atlantic halibut SNPs;  
CC and (ii) a nucleic acid having nucleotide sequence that hybridises to  
CC (i), or its complement under highly stringent hybridisation conditions.  
CC Also described: (1) an isolated oligonucleotide (II) comprising at least  
CC 17 contiguous nucleotides of a nucleotide sequence of S. salar SNPs, O.  
CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod  
CC polymorphic sites and seabass polymorphic sites, or their complement; (2)



PT diseases.  
XX  
PS Claim 14; SEQ ID NO 13; 54bp; English.  
XX  
CC The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PTEN (also known as MMAC1 and TEP1). The  
CC compound is useful for inhibiting the expression of PTEN in cells or  
CC tissues to treat diseases associated with their expression, e.g.  
CC metabolic diseases or conditions, type 2 diabetes or hyperproliferative  
CC conditions. In addition, the compound is used for diagnostics,  
CC prophylaxis, or as research reagents or kits. The invention is useful in  
CC gene therapy. The present sequence is human PTEN DNA specific antisense  
CC oligonucleotide.  
XX  
SQ Sequence 18 BP; 1 A; 7 C; 9 G; 1 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.4; DB 1; Length 18;  
Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 633 GGAGAGTGGCGCGCG 649  
DB 1 GGGAGCTGCCCGCCG 17  
RESULT 211  
AAV4864  
ID AAV4864 standard; DNA; 20 BP.  
XX  
XX AAV4864;  
XX  
XX 15-OCT-1998 (first entry)  
XX  
XX ErbB-2 gene antisense oligonucleotide ErbB-2-N-73.  
XX  
XX ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.  
XX  
XX Synthetic.  
XX OS Homo sapiens.  
XX  
XX EP856579-A1.  
XX PN  
XX 05-AUG-1998.  
XX PD  
XX 31-JAN-1997; 97EP-00101531.  
XX PF  
XX 31-JAN-1997; 97EP-00101531.  
XX PR  
XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.  
XX PA  
XX Schlingensiefen K, Brysch W;  
XX PI  
XX WPI: 1998-400910/35.  
XX DR  
XX  
XX Preparation of antisense oligo:nucleotide(s) which lack long runs of  
XX consecutive guanosine or inosine - and have specific ratio of residues  
XX able to form two or three hydrogen bonds, have greater activity and  
XX reduced toxicity, used therapeutically or to modulate growth of cells in  
XX culture.  
XX  
XX Example 4; Fig 6d; 286bp; English.  
XX PS  
XX AAV48709-886 represent antisense oligonucleotides directed against the  
XX ErbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in  
XX significant reduction in ErbB-2 protein expression, while  
XX oligonucleotides AAV48792-886 had little effect. The oligonucleotides  
XX exemplify the invention. The specification describes oligonucleotides  
XX that contain 8-30 nucleotides, which contain at most 8 nucleotides that  
XX can each form three hydrogen bonds to cytosine; do not contain four  
XX consecutive nucleotides able to form three H-bonds each to four  
XX consecutive cytosines; do not contain two sequences of three consecutive  
XX nucleotides each able to form three H-bonds to three consecutive  
XX cytosines, and the ratio between residues able to form two H-bonds each

CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The  
CC oligonucleotides are used to modulate expression of genes, particularly  
CC the genes for p3, Erb-2, JunB, JunD, TGF-beta 1 or beta 2 to control  
CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or  
CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The  
CC oligonucleotides can also be used to analyse function of proteins (by  
CC altering their expression or activity) and therapeutically, e.g. in cases  
CC of cancer or (targeting TGF) for stimulating the immune system  
XX  
SQ Sequence 20 BP; 16 A; 2 C; 1 G; 1 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 3.3e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAA 1536  
DB 4 AAAAAAAGTAA 20  
RESULT 212  
ABK27878  
ID ABK27878 standard; DNA; 20 BP.  
XX  
XX ABK27878;  
XX  
XX 09-APR-2002 (first entry)  
XX  
XX Corn male reproductive tissue promoter, PCR primer #68.  
XX DE  
XX Corn; male reproductive tissue; promoter; plant; gene stacking;  
XX KM fertility; insect; pathogen; herbicide tolerance; primer; ss.  
XX KW  
XX Zea mays.  
XX OS  
XX WO200200905-A2.  
XX PN  
XX 03-JAN-2002.  
XX PD  
XX 26-JUN-2001; 2001WO-US020658.  
XX PF  
XX 28-JUN-2000; 2000US-0214357P.  
XX PR  
XX (MONS ) MONSANTO TECHNOLOGY LLC.  
XX PA  
XX Conner TW, Dubois P, Malven M, Masucci JD;  
XX PI  
XX WPI: 2002-147890/19.  
XX DR  
XX  
XX New plant regulatory sequences or promoters and nucleic acids encoding  
XX PT them, useful for regulating gene expression, especially in male  
XX PT reproductive tissues.  
XX  
XX Example 3; Page 104; 131bp; English.  
XX PS  
XX The invention relates to an isolated nucleic acid (I) promoter capable of  
XX regulating transcription of an operably linked DNA sequence. The promoter  
XX sequences may be used for selectively modulating expression of any  
XX operatively linked gene and provide additional regulatory element  
XX diversity in a plant expression vector in gene stacking approaches, and  
XX for regulating gene expression in male reproductive tissues or gene  
XX transduction of any target gene (e.g. for controlling fertility, insect,  
XX pathogen or herbicide tolerance). The nucleic acids are useful as  
XX hybridisation probes or primers in hybridisation assays of other plant  
XX tissues to identify closely related or homologous genes and associated  
XX regulatory sequences. ABK27808-ABK27918 represent corn male reproductive  
XX tissue promoter sequences and PCR primers of the invention  
XX  
SQ Sequence 20 BP; 1 A; 4 C; 10 G; 5 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 3.3e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 552 GCGTGTGCGTGTGCG 568  
DB 2 GCGAGTGGCGTGTGCG 18

RESULT 213  
ACA89978  
ID ACA89978 standard; DNA; 20 BP.

AC ACA89978;  
DT 10-JUL-2003 (first entry)

DE Cardiovascular disease differential gene expression related primer #25.

XX KM Cardiovascular disease; arteriosclerosis; ischaemia; angina pectoris;  
KM myocardial infarction; cardiac; antiarteriosclerotic; antianginal;  
KM gene therapy; differential gene expression; PCR; primer; ss.

XX OS Homo sapiens.  
XX PN WO2003031650-A2.  
XX PD 17-APR-2003.  
XX PF 02-OCT-2002; 2002MO-BP011034.  
XX PR 08-OCT-2001; 2001GB-00024145.  
XX PA (FARB ) BAYER AG.  
XX PI Munnes M, Gehrman M, Wick M, Schmitz G;  
XX DR WPI; 2003-403108/38.

XX PT Predicting, diagnosing or prognosing a cardiovascular disease, e.g.  
XX PT angina, ischaemia, myocardial infarction or arteriosclerosis by detection  
XX PT of a polynucleotide in a biological sample comprises detecting a  
XX PT hybridization complex.

XX PS Example 3; Page 103; 454pp; English.

XX CC The invention describes a method of predicting, diagnosing or prognosing  
XX CC a cardiovascular disease by detection of a polynucleotide in a biological  
XX CC sample comprises hybridizing at least one of the polynucleotide to a  
XX CC nucleic acid material of a biological sample, thus forming a  
XX CC hybridization complex, and detecting the hybridization complex. The  
XX CC polynucleotides, polypeptides, antisense molecule, antibody and reagent  
XX CC are useful for preparing compositions for preventing, predicting or  
XX CC diagnosing, or a medicament for treating a cardiovascular disease, e.g.  
XX CC arteriosclerosis, ischaemia, angina pectoris, or myocardial infarction.  
XX CC This sequence represents a primer used to identify genes differentially  
XX CC regulated in individuals with cardiovascular disease

XX SQ Sequence 20 BP; 1 A; 3 C; 7 G; 9 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 3.3e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 722 GTTTGCTGTGCTGCT 738  
DB 1 GATTGCTGTGCTGCT 17

RESULT 214  
AB291205  
ID AB291205 standard; DNA; 20 BP.  
XX AC AB291205;  
XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.  
XX KM Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX KM antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX KM antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
XX KM antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX KM lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002MO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIC-) EPIGENESIS PHARM INC.  
XX PI Nyce JM, Li Y, Sandraeagra A, Katz E, Pabalan J, Aguilar D;  
XX PI Miller S, Tang L, Shahabuddin S;  
XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
XX PT respiration, has oligo(s) antisense to specific gene(s) or its  
XX PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
XX PT ubiquinone.

XX PS Disclosure; SEQ ID NO 6447; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
XX CC first active agent comprising an oligonucleotide antisense to the  
XX CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
XX CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
XX CC junctions of genes encoding a polypeptide associated with lung and/or  
XX CC nasal airway dysfunction and a second active agent comprising an  
XX CC antiinflammatory steroid and ubiquinone. A composition of the invention  
XX CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
XX CC immunosuppressive, and cytostatic activity. The composition may have a  
XX CC use in antisense gene therapy. The composition is useful for treating or  
XX CC preventing a respiratory, lung or malignant disease or condition, also  
XX CC for enhancing the prophylactic or therapeutic respiratory effect of an  
XX CC antiinflammatory steroid in a subject, for reducing or depleting levels  
XX CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
XX CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
XX CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
XX CC lung inflammation, lung allergies, or a respiratory disease or condition.  
XX CC Note: The sequence data for this patent is not represented in the printed  
XX CC specification, but was obtained in electronic format directly from WIPO  
XX CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 3.3e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1551 GTCACCCAGAAATGCCAG 1567  
DB 3 GTCACCCAGAAATGCCAG 19

RESULT 215  
ABD27435  
ID ABD27435 standard; DNA; 20 BP.  
XX AC ABD27435;  
XX DT 29-JUL-2004 (first entry)

XX H37989-derived oligonucleotide SEQ ID 6447.  
 DE Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KM respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KM surfactant depletion; antiasthmatic; antiinflammatory; antiasthmatic;  
 KM analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KM respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KM pulmonary transplantation rejection; ss; primer.  
 XX Homo sapiens.  
 OS  
 XX WO200285309-A2.  
 PN  
 XX 31-OCT-2002.  
 PD  
 XX 23-APR-2002; 2002WO-US013113.  
 PF  
 XX 24-APR-2001; 2001US-0286036P.  
 PR  
 XX (EPIC-) EPIGENESIS PHARM INC.  
 PA  
 XX Nyce JM, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
 P1 Miller S, Tang L, Shahabuddin S;  
 P2 MPI; 2003-093058/08.  
 DR  
 XX Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 PS  
 XX Claim 15; SEQ ID NO 6447; 763pp; English.  
 CC This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has antiasthmatic, antiinflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability of or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiratory vasodilation,  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 CC  
 XX Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 1.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 3.3e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1551 GTCACCCGAGATGCCAG 1567  
 DB 3 GTCACCCGAGATGCCAG 19  
 RESULT 216  
 AAH40594/C  
 ID AAH40594 standard; DNA, 21 BP.  
 XX  
 AC AAH40594;  
 XX  
 DT 14-AUG-2001 (first entry)  
 DE  
 XX SNP specific lower PCR primer SEQ ID 3390.  
 DE  
 XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;  
 KM SNP; genotyping; agammaglobulinemia; diabetes insipidus; cancer;  
 KM Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolemia;  
 KM polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;  
 KM acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;  
 KM inflammation; forensic investigation; paternity analysis; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 OS  
 XX WO200129262-A2.  
 PN  
 XX 26-APR-2001.  
 PD  
 XX 13-OCT-2000; 2000WO-US028436.  
 PF  
 XX 15-OCT-1999; 99US-0160096P.  
 PR  
 XX (ORCH-) ORCHID BIOSCIENCES INC.  
 PA  
 XX Picoult-Newburg L, Pohl M;  
 P1 MPI; 2001-290930/30.  
 DR  
 XX  
 XX New genotyping oligonucleotide, useful for detecting the presence,  
 PT absence or identity of single polynucleotide polymorphism in a nucleic  
 PT acid sample.  
 PS  
 XX Claim 1; Page 67; 83pp; English.  
 CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
 CC primer extension (SNPE) primers, and the sequences of regions flanking  
 CC sites of single nucleotide polymorphisms SNPs. The present invention  
 CC includes kits for determining the presence or absence of a SNP, using the  
 CC oligonucleotides of the invention. The PCR primers are used to amplify a  
 CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
 CC The oligonucleotides are useful for genotyping a nucleic acid sample by  
 CC performing a single-nucleotide primer extension reaction. The  
 CC oligonucleotides are useful for determining the presence, absence or  
 CC identity of a SNP and for genotyping nucleic acid samples, for e.g., to  
 CC assess by association analysis the genotype of an individual or group of  
 CC individuals, having a pathological phenotypic trait suspected of being  
 CC caused by one or more SNPs. Phenotypic traits include diseases e.g.,  
 CC agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
 CC dystrophy, familial hypercholesterolemia, polycystic kidney disease,  
 CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
 CC traits also include symptoms of or susceptibility to multifactorial  
 CC diseases of which a component is or may be genetic such as autoimmune  
 CC diseases, including rheumatoid arthritis, multiple sclerosis,  
 CC inflammation, cancer, nervous system diseases and infection by pathogenic  
 CC microorganism. The method is also useful in forensic investigations and  
 CC paternity analysis. The present sequence represents a PCR primer specific  
 CC for a human SNP containing DNA sequence  
 XX  
 XX Sequence 21 BP; 4 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 1.1%; Score 15.4; DB 1; Length 21;  
 Best Local Similarity 94.1%; Pred. No. 3.1e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;



1403 GTGTCAAGATTAAGGTT 1419  
 |||||  
 21 GTGTCAAGATTAAGGTT 5  
 DB  
 RESULT 217  
 ABD255908  
 ID ABD255908 standard; DNA; 21 BP.  
 AC  
 XX ABD255908;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE A1654215-derived oligonucleotide SEQ ID 4920.  
 XX  
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 KW  
 OS Homo sapiens.  
 XX  
 XX WO200285309-A2.  
 PN  
 XX 31-OCT-2002.  
 PD  
 XX 23-APR-2002; 2002WO-US013143.  
 PF  
 XX 24-APR-2001; 2001US-0286036P.  
 PR  
 XX (EPIG-) EPIGENESIS PHARM INC.  
 PA  
 XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 DR WPI; 2003-093058/08.  
 XX  
 XX Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 PS  
 XX Claim 15; SEQ ID NO 4920; 763bp; English.  
 PS  
 XX This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

CC	transplantation rejection, pulmonary infections, bronchitis or cancer.
CC	The reduced adenosine content of the anti-sense oligos corresponding to
CC	thymidines present in the target RNA serves to prevent the breakdown of
CC	the oligonucleotides into products that free adenosine into the system
CC	e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC	prevent any unwanted effects due to it
XX	
SQ	Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 1 Other;
Query Match	1.1%; Score 15.4; DB 1; Length 21;
Best Local Similarity	88.9%; Pred. No. 3.1e+02;
Matches 16; Conservative	0; Mismatches 2; Indels 0; Gaps 0
CY	1520 AAAAAAAAAAAGTAAA 1537       1 AAAAAAAAAAAAAAAAAAAAA 18
Db	
RESULT 218	
AD130232	
ID	AD130232 standard; DNA; 21 BP.
AC	
XX	AD130232;
XX	
DT	22-APR-2004 (first entry)
XX	
DE	Human PTEN specific antisense oligonucleotide, ISIS 29579.
XX	
KW	PTEN; metabolic disease; type 2 diabetes; hyperproliferative condition; prophylaxis; gene therapy; human; MMAC1; phosphorothioate backbone; TEPI;
KX	antisense; de.
OS	Homo sapiens.
OS	Synthetic.
XX	
FH	Location/Qualifiers
FT	modified_base 20..21
FT	/tag= a
FT	/mod_base= OTHER
FT	/note= "Phosphorothioate backbone"
XX	
PN	US2004002153-A1.
XX	
PD	01-JAN-2004.
XX	
PF	03-JAN-2003; 2003US-00336213.
XX	
PR	21-JUL-1999; 99US-00356381.
PR	14-DEC-1999; 99WO-US029594.
PR	24-MAY-2000; 2000US-00577902.
PR	11-JUN-2001; 2001US-00878582.
PR	18-SEP-2002; 2002US-0411780P.
XX	
PA	(MONI/) MONIA B P.
PA	(BENN/) BENNETT C F.
PA	(BAKE/) BAKER B F.
PA	(VICK/) VICKERS T.
PI	Monia BP, Bennett CF, Baker BF, Vickers T;
DR	
WP1	2004-061664/06.
XX	
XX	New double-stranded oligomeric compounds that modulate PTEN expression, useful for diagnosing, preventing or treating conditions associated with PTEN, e.g. metabolic diseases, type 2 diabetes or hyperproliferative diseases.
PT	
XX	
PS	Example 32; SEQ ID NO 58; 54bp; English.
XX	
CC	The invention relates to antisense compounds, compositions and methods for modulating the expression of PTEN (also known as MMAC1 and TEP1). The compound is useful for inhibiting the expression of PTEN in cells or tissues to treat diseases associated with their expression, e.g.
CC	

CC metabolic diseases or conditions, type 2 diabetes or hyperproliferative  
 CC conditions. In addition, the compound is used for diagnostics, useful in  
 CC prophylaxis, or as research reagents or kits. The invention is useful in  
 CC gene therapy. The present sequence is human PTEN DNA specific double  
 CC stranded antisense oligonucleotide.  
 XX Sequence 21 BP; 1 A; 8 C; 9 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 1.1%; Score 15.4; DB 1; Length 21;  
 Best Local Similarity 94.1%; Pred. No. 3.1e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 633 GGGAGGTGCGCCCGCG 649  
 DB 1 GGGAGGTGCGCCCGCG 17  
 RESULT 219  
 ADK67451/C  
 ID ADK67451 standard; DNA; 21 BP.  
 XX  
 AC ADK67451;  
 XX  
 DT 06-MAY-2004 (first entry)  
 DE Electrochemical detection intercalator-related DNA 1.  
 XX  
 KW intercalator; electrochemical detection; mismatch; ds.  
 XX  
 OS Synthetic.  
 XX JP2004024114-A.  
 XX  
 PD 29-JAN-2004.  
 XX  
 PF 26-JUN-2002; 2002JP-00185555.  
 XX  
 PR 26-JUN-2002; 2002JP-00185555.  
 XX  
 PA (TAKE/) TAKENAKA S.  
 PA (TUMK-) TUM KENKYUSHO KK.  
 XX  
 DR WPI; 2004-207136/20.  
 XX  
 PT Novel intercalator, useful as electrochemical double stranded DNA  
 PT detection reagent.  
 XX  
 PS Example 1; Page 23; 24pp; Japanese.  
 XX  
 CC The invention relates to a novel intercalator having a specific formula.  
 CC The intercalator of the invention may be useful for the electrochemical  
 CC detection of a gene, as an electrochemical double stranded DNA detection  
 CC reagent and as an intercalator for inhibiting the influence of mismatch  
 CC DNA and single stranded DNA. The intercalator enables the transmission of  
 CC electronic transition between two base pairs to occur efficiently. The  
 CC current sequence is that of the electrochemical detection intercalator-  
 CC related DNA 1 of the invention.  
 XX  
 SQ Sequence 21 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 1 Other;  
 Query Match 1.1%; Score 15.4; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 3.1e+02;  
 Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
 OY 1520 AAAAAAAAAAAGTAAAG 1538  
 DB 19 AAAAAAAAAAAGTAAAG 1  
 RESULT 220  
 AD060172  
 ID AD060172 standard; DNA; 21 BP.  
 XX

AC AD060172;  
 XX  
 DT 26-AUG-2004 (first entry)  
 XX  
 DE Human TFAP-2-beta (type II diabetes-related) gene-specific probe #6.  
 XX  
 KW human; polymorphism detection; TFAP-2-beta; type II diabetes;  
 KW polymorphic region; ss; probe.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004048572-A1.  
 XX  
 PD 10-JUN-2004.  
 XX  
 PF 21-NOV-2003; 2003WO-JP014936.  
 XX  
 PR 22-NOV-2002; 2002JP-00338704.  
 XX  
 PR 31-MAR-2003; 2003JP-00095885.  
 XX  
 PA (RIKE ) RIKEN KK.  
 XX  
 PI Maeda S, Nakamura Y, Tsukada S;  
 XX  
 DR WPI; 2004-450383/42.  
 XX  
 DT Novel probe for detecting polynucleotide associated with risk of  
 DT developing type II diabetes, the polynucleotide containing a substitution  
 PT of guanine to thymine at position 774 of first intron of TFAP-2 beta  
 PT gene.  
 XX  
 PS Claim 19; SEQ ID NO 46; 65pp; Japanese.  
 XX  
 CC The invention comprises primers and probes for detecting a polymorphism  
 CC in the human TFAP-2-beta gene associated with risk of developing type II  
 CC diabetes. The primers and probes of the invention are useful for  
 CC detecting the polymorphism in the human TFAP-2-beta gene associated with  
 CC risk of developing type II diabetes. The present DNA sequence represents  
 CC a probe that was used to detect the type 2 diabetes-related polymorphism  
 CC in the human TFAP-2-beta gene.  
 XX  
 SQ Sequence 21 BP; 15 A; 0 C; 2 G; 3 T; 0 U; 1 Other;  
 Query Match 1.1%; Score 15.4; DB 1; Length 21;  
 Best Local Similarity 94.1%; Pred. No. 3.1e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 1516 AATTAAAAAAG 1532  
 DB 4 AGTTAAAAAAG 20  
 RESULT 221  
 AAQ75581  
 ID AAQ75581 standard; DNA; 20 BP.  
 XX  
 AC AAQ75581;  
 XX  
 DT 04-AUG-1995 (first entry)  
 DE Reverse transcription primer used in cDNA analysis technique.  
 XX  
 KW Analysis; gene expression; reverse transcription; primer; cDNA;  
 KW aggregate; restriction enzyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN JP06303997-A.  
 XX  
 PD 01-NOV-1994.  
 XX  
 PF 16-APR-1993; 93JP-00112515.  
 XX

```
PR 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 2 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1246 TCTTGTGTTGTTTAAAT 1265
DB 1 TTTTGTGTTTGTGTTTAAAT 20

RESULT 222
AAQ75585/C
ID AAQ75585 standard; DNA; 20 BP.
XX
XX AAQ75585;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 1 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
```

```
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1516 AATTAAAAAAGTAA 1535
DB 20 AATTAAAAAAGTAA 1

RESULT 223
AAQ75596/C
ID AAQ75596 standard; DNA; 20 BP.
XX
XX AAQ75596;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1518 TTAATAAAAAAGTAAA 1537
DB 20 TTAATAAAAAAGTAAA 1

RESULT 224
AAQ75589/C
ID AAQ75589 standard; DNA; 20 BP.
XX
XX AAQ75589;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX
```

```

KM aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PE 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1517 ATTAAAAAAAAAAAGTAAA 1536
Db 20 ATGAAAAAAAAAAAAAAAAA 1
XX
RESULT 225
AAQ75577/c
ID AAQ75577 standard; DNA; 20 BP.
XX
AC AAQ75577;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PE 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
```

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CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1517 ATTAAAAAAAAAAAGTAAA 1536
Db 20 ATGAAAAAAAAAAAAAAAAA 1
XX
RESULT 226
AAQ75597/c
ID AAQ75597 standard; DNA; 20 BP.
XX
AC AAQ75597;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PE 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1517 ATTAAAAAAAAAAAGTAAA 1536
Db 20 ATGAAAAAAAAAAAAAAAAA 1
XX
RESULT 227
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```
AAQ75588/C
ID AAQ75588 standard; DNA; 20 BP.
XX
AC AAQ75588;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KM Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1512 TGTAAATTAAAAA 1531
DB 20 TGTAAAAA 1
XX
RESULT 228
AAQ75564/C
ID AAQ75564 standard; DNA; 20 BP.
XX
AC AAQ75564;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KM Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
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XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1518 TTTAAAAAAGTAAA 1537
DB 20 TTTAAAAA 1
XX
RESULT 229
AAQ75565/C
ID AAQ75565 standard; DNA; 20 BP.
XX
AC AAQ75565;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KM Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
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Query Match      1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY      1517 ATTAATAAATAAATAAATAA 1536
      |||||||
Db      20 ATCAAAAAAAAAAAAAAAAA 1

RESULT 230
AAQ75595
ID AAQ75595 standard; DNA; 20 BP.
XX
XX AAQ75595;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JPO630397-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESCO files AAQ75547-075798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
Query Match      1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY      1302 TCTATTTTATTTTATTCAG 1321
      |||||||
Db      1 TTTTATTTTATTTTATTCAG 20

RESULT 231
AAK24525/C
ID AAK24525 standard; DNA; 20 BP.
XX
XX AAK24525;
XX
XX 20-MAR-2003 (revised)
XX
XX 21-JUN-1999 (first entry)
XX
XX Human SR-BI gene exon 8 primer 3e81srbl.
XX
XX SR-BI; human; polymorphism; cardiovascular disorder; ischaemia;

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KW stenosis; congestive heart failure; atherosclerosis; cholesterol;
KW low density lipoprotein; LDL; high density lipoprotein; HDL; diagnosis;
KW body mass index; obesity; cachexia; gallstone; PCR; primer; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX W09902735-A2.
XX
XX 21-JAN-1999.
XX
XX 10-JUL-1998; 98WC-US014354.
XX
XX 10-JUL-1997; 97US-00890979.
XX
XX 27-FEB-1998; 98US-00031626.
XX
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX (TUFT ) UNIV TUFTS.
XX
XX Acton SL, Ordovas JM;
XX
XX WPI; 1999-120935/10.
XX
XX Detecting genetic predisposition for body mass disorders - by identifying
XX allelic variants of a polymorphic region of the SR-BI gene.
XX
XX Example 2; Page 68; 102pp; English.
XX
XX Primer 3e81srbl is used with primer 5e81srbl (see AAK24524) in the PCR
XX amplification of exon 8 (see AAK24505) of the human SR-BI gene. The
XX invention is based on the discovery of the genomic structure of the human
XX SR-BI gene (see AAK24498-509) and on the identification of polymorphic
XX regions within the gene which are associated with abnormal body mass
XX index (BMI) and abnormal lipoprotein levels and hence with disorders such
XX as obesity, cachexia, cardiovascular disorders and gallstone formation.
XX Primers (see AAK24510-35) are provided for amplification of the exons,
XX introns and promoter region of the SR-BI gene for detection of
XX polymorphisms and mutations. The invention provides methods for
XX determining whether a subject has, or is at risk of developing, a disease
XX associated with a specific allele of a polymorphic region of an SR-BI
XX gene. Kits comprising the relevant probe or primer are claimed. (Updated
XX on 20-MAR-2003 to correct PA field.)
XX
XX Sequence 20 BP; 4 A; 13 C; 1 G; 2 T; 0 U; 0 Other;
XX
Query Match      1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY      1037 GTGGCGCGCGGTGTGTGTA 1056
      |||||||
Db      20 GTGGGCTGGGTGTGTGGAA 1

RESULT 232
AAK24617/C
ID AAK24617 standard; DNA; 20 BP.
XX
XX AAK24617;
XX
XX 21-JUN-1999 (first entry)
XX
XX Human SR-BI gene exon 8 primer 3e81srbl.
XX
XX SR-BI; human; polymorphism; cardiovascular disorder; ischaemia;
XX stenosis; congestive heart failure; atherosclerosis; cholesterol;
XX low density lipoprotein; LDL; high density lipoprotein; HDL; diagnosis;
XX body mass index; obesity; cachexia; gallstone; PCR; primer; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX W09902736-A2.

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XX 21-JAN-1999.
PD 10-JUL-1998; 98WO-US014359.
XX 10-JUL-1998; 98WO-US014359.
XX 10-JUL-1997; 97US-00890980.
XX 27-FEB-1998; 98US-00032894.
XX (MILL-) MILLENNIUM PHARM INC.
PA
XX
XX Acton SL;
PI
XX WPI; 1999-120936/10.
DR
XX New nucleic acids comprising intronic sequence of a human scavenger
PT receptor-BI (SR-BI) gene - useful for prognosis, diagnosis and treatment
XX of SR-BI associated diseases or conditions.
XX
XX Claim 10; Page 67; 103pp; English.
PS
XX Primer 3e81arbl is used with primer 5e81arbl (see AAX24616) in the PCR
CC amplification of exon 8 (see AAX24597) of the human SR-BI gene. The
CC invention is based on the discovery of the genomic structure of the human
CC SR-BI gene (see AAX24590-601) and on the identification of polymorphic
CC regions within the gene which are associated with abnormal body mass
CC index (BMI) and abnormal lipoprotein levels and hence with disorders such
CC as obesity, cachexia, cardiovascular disorders and gallstone formation.
CC Claimed primers (see AAX24602-25) are used for the amplification of the
CC exons, introns and promoter region of the SR-BI gene for detection of
CC polymorphisms and mutations. The invention provides methods for
CC determining whether a subject has, or is at risk of developing, a disease
CC associated with a specific allele of a polymorphic region of an SR-BI
CC gene. Kits comprising the relevant probe or primer are claimed
XX
SQ Sequence 20 BP; 4 A; 13 C; 1 G; 2 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1037 GTGGCGCGCGGTGCTGTAA 1056
DB 20 GTGGCGCTGGCGGTGCTGGAA 1
RESULT 233
AAZ95073
ID AAZ95073 standard; DNA; 20 BP.
XX
AC AAZ95073;
XX
DT 05-JUN-2000 (first entry)
XX
XX Human UGT2B7 exon 1 polymorphism 5a nucleotide sequence.
DE
XX
XX UDP-glucuronosyltransferase 2B7; UGT2B7; polymorphism; metabolism; SNPs;
KW drug interaction; detect; human; single nucleotide polymorphism; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FT variation /tag= a
XX
XX WO200006776-A1.
XX
XX 10-FEB-2000.
XX
XX 22-JUL-1999; 99WO-US016675.
XX
XX 28-JUL-1998; 98US-0094391P.
XX
XX (AXYS-) AXYS PHARM INC.
PA
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XX Galvin M, Miller A, Penny L, Riedy M;
PI
XX WPI; 2000-195321/17.
DR
XX Novel human UDP-glucuronosyltransferase sequence, polymorphisms for
PT genotyping individuals to predict rate of metabolism of substrates and
XX for identifying potential drug interactions.
XX
XX Claim 1; Page 23; 72pp; English.
PS
XX This sequence represents a polymorphic fragment of exon 1 of the human
CC UDP-glucuronosyltransferase 2B7 (UGT2B7) gene. UDP-
CC glucuronosyltransferase (UGTs) are a family of enzymes that catalyse the
CC glucuronic acid conjugation of a wide range of endogenous and exogenous
CC substrates. The UGT2B gene subfamily encode steroid metabolizing isoforms
CC in the liver. Alteration of the expression or function of UGTs may effect
CC drug metabolism. The invention relates to non-chromosomal nucleic acid
CC molecules, which comprise human UGT2B sequence polymorphisms. Probes
CC which detect the UGT2B locus polymorphisms can be used to detect altered
CC UGT2B metabolism of a substrate in an individual. The nucleic acid
CC molecules comprising a human UGT2B sequence polymorphism can be used in
CC screening assays for genotyping individuals, also to predict their rate
CC of metabolism of UGT2B substrate, potential drug-drug interactions and
CC adverse side effects. The polymorphisms can be used as single nucleotide
CC polymorphisms (SNPs) for detecting genetic linkage related to phenotypic
CC variation in activity or expression of UGT2B protein. The polymorphism
CC containing nucleic acid molecules may also be used for generating
CC genetically modified non-human animals and for obtaining site specific
CC gene modification in cell lines
XX
SQ Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1632 CCTCCCTACCCCTTTGAAA 1651
DB 1 CCTGGCTACACTTTGAAA 20
RESULT 234
AAZ51514/C
ID AAZ51514 standard; DNA; 20 BP.
XX
AC AAZ51514;
XX
DT 03-JUL-2000 (first entry)
XX
XX Forward primer for lycopene beta-cyclase B allele amplification.
DE
XX
XX PCR primer; lycopene beta-cyclase; gene expression; chromogenic tissue;
KW carotogenesis; tomato mutant; tomato; tomato introgression line IL 6-2;
KW B1 clone; fine mapping; fruit development; ss.
XX
XX Lycopersicon esculentum.
OS
XX
XX WO200008920-A1.
XX
XX 24-FEB-2000.
XX
XX 12-AUG-1999; 99WO-US018327.
XX
XX 14-AUG-1998; 98US-00134607.
XX
XX (YISS ) YISSUM RES & DEV CO.
XX (FRIE/) FRIEDMAN M M.
XX
XX Friedman MM, Hirschberg J, Ronen G, Zamir D;
PI
XX WPI; 2000-246361/21.
XX
```

PT New polynucleotide encoding a polypeptide having lycopene cyclase  
PT catalytic activity is useful as a probe for identifying homologous genes  
PT and for controlling gene expression in chromogenic tissues of plants.  
XX  
PS Example; Page 14; 53pp; English.  
XX  
CC The patent discloses the use of DNA segments having lycopene cyclase  
CC catalytic activity and its control elements for controlling gene  
CC expression in chromogenic tissues of plants, especially fruits and  
CC flowers, by altering carotogenesis. They can be used as probes for  
CC isolating gene encoding polypeptides homologous to lycopene cyclase.  
CC Dominant allele of gene B from tomato mutant 'high-beta' was mapped to  
CC chromosome no.6 and was found in the tomato introgression line IL 6-2.  
CC The present sequence is a forward PCR primer used in the amplification of  
CC full length cDNA of the B allele. This primer was derived from the B1  
CC clone. This was used in fine mapping and cloning of the B locus and  
CC sequence analysis to determine the regulation of expression of B gene  
CC during fruit development in tomato  
XX  
SQ Sequence 20 BP; 6 A; 1 C; 6 G; 7 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1468 TGAACATTTCAATTCAGC 1487  
DB 20 TCAACATTTCAATTCAGC 1  
RESULT 235  
AAC67142  
ID AAC67142 standard; DNA; 20 BP.  
XX  
AC AAC67142;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE Human E2F transcription factor 3 mRNA antisense sequence SEQ ID NO: 15.  
XX  
KW Human; E2F transcription factor 3; antisense; E2F-3; cancer;  
KW phosphorochioste backbone; infection; inflammation; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6165791-A.  
XX  
PD 26-DEC-2000.  
XX  
PF 24-FEB-2000; 2000US-00513729.  
XX  
PR 24-FEB-2000; 2000US-00513729.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Popoff I, Wyatt J;  
XX  
DR WPI; 2001-101698/11.  
XX  
PT Novel antisense compounds targeted to E2F transcription factor 3 for  
PT diagnosis, prophylaxis and treatment of diseases associated with E2F  
PT transcription factor 3 such as infection, inflammation or tumor  
PT formation.  
XX  
PS Example 15; Col 41-42; 41pp; English.  
XX  
CC The present invention provides antisense oligonucleotides with  
CC phosphorochioste backbones directed at the human E2F transcription factor  
CC 3 (E2F-3) coding sequences. These can be used in the therapy of diseases  
CC which can be treated by modulating E2F-3 expression and to prevent  
CC infection, inflammation and tumour formation  
CC  
XX Sequence 20 BP; 2 A; 7 C; 10 G; 1 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 428 CGGCTGGCGCGCGGCGAGC 447  
DB 1 CTGCAAGCGCGCGCGGAGC 20  
RESULT 236  
AAS97565/C  
ID AAS97565 standard; DNA; 20 BP.  
XX  
AC AAS97565;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Murine SACL gene-specific oligonucleotide PCR primer #170.  
XX  
KW Human; mouse; SACL; carbohydrate; sweetener; ethanol; alcoholism; ss;  
KW obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;  
KW blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;  
KW protein replacement therapy.  
XX  
OS Mus sp.  
XX  
PN WC200183749-A2.  
XX  
PD 08-NOV-2001.  
XX  
PF 25-APR-2001; 2001WO-US013387.  
XX  
PR 28-APR-2000; 2000US-0200794P.  
XX  
PR 28-JUL-2000; 2000US-0221419P.  
XX  
PR 10-NOV-2000; 2000US-0247443P.  
XX  
PA (WARN ) WARNER LAMBERT CO.  
XX  
PI (MONE-) MONELL CHEM SENSES CENT.  
XX  
PI Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;  
XX  
PI Ohmen JD, Reed DR, Rose D, Tordoff MG;  
XX  
DR WPI; 2002-075162/10.  
XX  
XX  
PT Novel isolated polypeptide comprising variant form of mouse or human SACL  
PT polypeptide, and is associated with altered preference for carbohydrates  
PT or other sweeteners, useful for preventing obesity, diabetes, alcoholism.  
XX  
PS Claim 14; Page 80; 239pp; English.  
XX  
CC The invention relates to an isolated polypeptide, comprising a variant  
CC form of mouse or human SACL polypeptide. The variant form is associated  
CC with altered preference for carbohydrates, other sweeteners or ethanol.  
CC The polypeptide and its associated DNA sequence can be produced by  
CC recombinant techniques and is useful for preventing obesity, diabetes or  
CC alcoholism associated with SACL expression. The sequences are useful in  
CC screening for drugs and sweeteners. Recombinant cell lines and transgenic  
CC embryos may be used in screening for and identifying agents that induce  
CC or repress function of SACL. Predisposition to diabetes, obesity or  
CC alcoholism can be ascertained by testing any fluid or tissue of a human  
CC (such as blood, pancreas or tongue) for sequence variations of the SACL  
CC gene. A sequence variation of the SACL locus may indicate a  
CC predisposition to diabetes, obesity and/or alcoholism and may provide a  
CC diagnostic mark. The polynucleotide can be detected in a biological  
CC sample by contacting the DNA with a probe to form a hybridisation complex  
CC which is then detected. The sequences represent cDNA encoding human and  
CC mouse SACL polypeptides and PCR primers specific for the SACL genes  
XX  
SQ Sequence 20 BP; 9 A; 6 C; 3 G; 2 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;



```
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 808 CTGAATTTGTTGCATC 827
   |||||
DB 20 CGGATTTTGTGTGCATC 1

RESULT 237
AAL43954
ID AAL43954 standard; DNA; 20 BP.
AC AAL43954;
XX
XX
DT 27-SEP-2002 (first entry)
DE Polynucleotide separation method - related oligonucleotide SEQ ID #2.
XX
XX Polynucleotide separation; ss; non-polar surface;
XX multivalent cation free.
XX
XX Unidentified.
XX OS
XX WO200240130-A1.
XX
XX PD 23-MAY-2002.
XX
XX PF 05-SEP-2001; 2001WO-US027495.
XX
XX PR 16-NOV-2000; 2000US-00714579.
XX
XX PA (TRAN-) TRANSGENOMIC INC.
XX
XX PI Gjerde DT, Haeefle RM, Hanna CP, Hornby D, Kuklin AI, Taylor PD;
XX
XX DR WPI; 2002-566535/60.
XX
XX PT Separation of a mixture of single-stranded polynucleotides e.g. DNA, or
XX RNA, comprises applying the mixture to a polymeric separation medium
XX having non-polar surfaces, and then separating the mixture.
XX
XX Example 16; Page 43; 91pp; English.
XX
XX PS The invention comprises a method of separating a mixture which contains
XX single-stranded polynucleotides. The method of the invention involves
XX applying the mixture to a polymeric separation medium having non-polar
XX surfaces. The non-polar surfaces are free from multivalent cations
XX (preferably chromium, iron, nickel and/or copper) and are free to bind or
XX interfere with the polynucleotides. The method of the invention is useful
XX for separating a mixture that contains single-stranded polynucleotides
XX (e.g. DNA and RNA) having lengths from 5 - 200 up to 2000 - 20000
XX nucleotides from impurities (e.g. failure sequences, salts and/or
XX proteins). The method of the invention allows separation to be achieved
XX within 10 - 30 minutes, in contrast to conventional gel chromatography
XX which can require hours or days. The present DNA sequence represents an
XX oligonucleotide that was used in an example of the invention
XX
XX SQ Sequence 20 BP; 5 A; 0 C; 2 G; 13 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1332 TAAGTTTAATTAATTAATTT 1351
   |||||
DB 1 TAAGTTTAATTAATTAATTT 20

RESULT 238
AAD46040
ID AAD46040 standard; DNA; 20 BP.
AC AAD46040;
XX
XX
```

```
DT 27-DEC-2002 (first entry)
XX
XX DE Human UGT2B7 DNA fragment #5.
XX
XX KM Human; UDP-glucuronosyl transferase; UGT; UGT2B7; toxicity; cancer;
XX therapy; epirubicin; cytosstatic; enzyme; gene; ds.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX FT variation replace(11, 7)
XX FT /*tag= a
XX FT /standard_name= "Single nucleotide polymorphism"
XX
XX PN WO200259375-A2.
XX
XX PD 01-AUG-2002.
XX
XX PF 25-JAN-2002; 2002WO-US002083.
XX
XX PR 26-JAN-2001; 2001US-0264534P.
XX
XX PA (UYCH-) UNIV CHICAGO.
XX
XX PI Ratain MJ, Innocenti F, Das S, Iyer L, Sawyer M;
XX
XX DR WPI; 2002-691534/74.
XX
XX PT Determining the dose of a UGT2B7-glucuronidated drug for treating cancer,
XX PT comprises determining the level of UGT2B7 activity or expression in a
XX patient.
XX
XX PS Disclosure; Page 54; 160pp; English.
XX
XX CC The invention relates to an UDP-glucuronosyl transferase (UGT) enzyme,
XX CC UGT2B7. The invention also relates to compositions and methods for
XX CC optimizing UGT2B7 substrate dosings and for predicting UGT2B7 substrate
XX CC toxicity. The method is useful in determining the dose of a UGT2B7-
XX CC glucuronidated drug that may be used in treating cancer patients. It is
XX CC also useful in determining persons at risk for epirubicin toxicity, in
XX CC reducing or eliminating side effects associated with epirubicin
XX CC treatment, and in ways of increasing the efficacy of dosage regimens. The
XX CC present sequence is human UGT2B7 DNA fragment
XX
XX SQ Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1632 CCTCCCTACCCCTTTGAAA 1651
   |||||
DB 1 CCTGGCTACACTTTGAAA 20

RESULT 239
ABZ31489
ID ABZ31489 standard; DNA; 20 BP.
AC ABZ31489;
XX
XX DT 30-JAN-2003 (first entry)
XX
XX DE Candida albicans GRACE strain PCR primer SEQ ID NO 5708.
XX
XX KM Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
XX signal transduction; DNA replication; cell division; growth;
XX proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX
XX OS Candida albicans.
XX
XX PN WO200253728-A2.
XX
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PD 11-JUL-2002.
XX
XX 26-DEC-2001; 2001WO-US049486.
XX
XX 29-DEC-2000; 2000US-0259128P.
XX 20-FEB-2001; 2001US-00792024.
XX 22-AUG-2001; 2001US-0314050P.
XX
XX (ELIT-) ELITRA PHARM INC.
XX
XX Roemer T, Jiang B, Boone C, Buesey H, Ohlsen KL;
XX WPI; 2002-566694/60.
XX
XX Constructing strains for identifying gene products as effective targets
XX for therapeutic intervention, by inactivating in the strain one allele of
XX a gene and placing other allele of the gene under conditional expression.
XX
XX Claim 36; SEQ ID NO 5708; 167pp + Sequence Listing; English.
XX
XX The invention relates to constructing (M1) a strain of diploid fungal
XX cells in which both alleles of a gene are modified, comprising modifying
XX one allele by insertion or replacement by a cassette having an
XX expressible selectable marker and modifying other allele by
XX recombination, of a promoter replacement fragment with a heterologous
XX promoter, so that expression of the second allele is regulated by the
XX promoter. (M1) is useful for constructing a strain of diploid fungal
XX cells in which both alleles of a gene are modified. The diploid fungal
XX cells having both alleles modified are useful for identifying a gene that
XX is essential to the survival or growth of a fungus, a gene that
XX contributes to the virulence and/or pathogenicity of a fungus, a gene
XX that contributes to the resistance of a diploid fungus to an antifungal
XX agent, an antifungal agent that inhibits the growth of a diploid fungus
XX and for identifying a therapeutic agent for treatment of a mammalian
XX disease. (M1) is useful for identifying a compound which modulates the
XX activity of a gene product, preferably enzymatic activity, carbon
XX compound catabolism, biosynthetic, transporter, transcriptional,
XX translational, signal transduction, DNA replication and cell division
XX activity. The method is useful for identifying a compound having the
XX ability to inhibit growth or proliferation of C. albicans cells and for
XX treating infection by C. albicans. The present sequence is that of a PCR
XX primer used in the method of the invention. Note: The sequence data for
XX this patent is not represented in the printed specification but is based
XX on sequence information supplied to Derwent by the European Patent Office
XX
XX Sequence 20 BP; 0 A; 5 C; 7 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 3.6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Oy 727 GCTGTTGCTGCTGCTTGT 746
XX |||||
XX 1 GCTGCTGCTGCTGCTTGT 20
XX
XX Db
XX
XX RESULT 240
XX AAD35095
XX ID AAD35095 standard; DNA; 20 BP.
XX
XX AAD35095;
XX
XX 25-JUL-2002 (first entry)
XX
XX HT15-C downstream PCR primer used for identification of genes.
XX
XX Mouse; X-chromosome; germ cell less gene; gcl gene; gene diagnosis;
XX sex discrimination; infertility treatment; chromosomal manipulation;
XX sperm separation; gene therapy; PCR; primer; ss.
XX
XX Unidentified.
XX
XX OS
XX PN EP1195382-A2.
```

```
XX
XX 10-APR-2002.
XX
XX 02-OCT-2001; 2001EP-00123259.
XX
XX 03-OCT-2000; 2000JP-00303994.
XX
XX (LIVE-) LIVESTOCK IMPROVEMENT ASSOC JAPAN INC.
XX (UYGU-) UNIV GUNMA.
XX
XX Alzawa A, Kawakami A, Kondo T;
XX WPI; 2002-354153/39.
XX
XX New X-chromosome gene expressed in haploid cells of the testis, useful
XX for gene diagnosis, discrimination of sex, separation of sperm,
XX infertility treatment and chromosomal manipulation.
XX
XX Example 1; Page 4; 28pp; English.
XX
XX The present invention relates to genes located on the X-chromosome of
XX mammals. These genes are specifically expressed in haploid cells of the
XX testis and encode amino acid sequences having homology with the amino
XX acid sequence encoded by drosophila germ cell less (gcl) gene. Sequences
XX of the invention are used for gene diagnosis, discrimination of sex,
XX separation of sperm, infertility treatment and chromosomal manipulation,
XX especially in livestock. They are also used in gene therapy. The present
XX DNA sequence is a PCR primer which is used for the identification of
XX genes by differential display method
XX
XX Sequence 20 BP; 2 A; 2 C; 1 G; 15 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 3.6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Oy 1300 AATCTATTTTATTTTC 1319
XX |||||
XX 1 AAGCTTTTTTTTTTTTC 20
XX
XX Db
XX
XX RESULT 241
XX ABZ79935
XX ID ABZ79935 standard; DNA; 20 BP.
XX
XX ABZ79935;
XX
XX 19-MAY-2003 (first entry)
XX
XX Mycobacterium tuberculosis muty-1 PCR primer SEQ ID NO:9.
XX
XX Mycobacterium tuberculosis; mutY2; alka; ogc; Rv3908; mutY; Rv3909;
XX detection; multidrug resistance; multiple drug resistance; MDR;
XX infection; PCR primer; ss.
XX
XX Mycobacterium tuberculosis.
XX OS
XX Synthetic.
XX
XX WO2003016562-A2.
XX
XX 27-FEB-2003.
XX
XX 14-AUG-2002; 2002WO-EP009679.
XX
XX 14-AUG-2001; 2001US-0311824P.
XX 21-AUG-2001; 2001US-0313523P.
XX
XX (INSP ) INST PASTEUR.
XX
XX Gicquel B;
XX
XX WPI; 2003-256711/25.
XX
```

PT Predicting the epidemic character of a Mycobacterium tuberculosis isolate  
PT and/or the acquisition of multiple drug resistance (MDR) by the isolate  
PT by detecting an alteration in the DNA repair system of the isolate.  
PS Disclosure; Page 17; 83pp; English.  
XX  
CC The present invention describes a method for predicting the epidemic  
CC character of a Mycobacterium tuberculosis isolate and/or a selective  
CC advantage to be maintained in the host and/or the acquisition of multiple  
CC drug resistance (MDR) by the isolate comprising detecting an alteration  
CC in the DNA repair system of the isolate. Also described: (1) detecting a  
CC Mycobacterium tuberculosis strain with a MDR phenotype; (2) a  
CC polymuclotide; (3) a kit for detecting Mycobacterium tuberculosis; (4)  
CC an *Escherichia coli* strain containing the plasmid pMC2501; and (5)  
CC detected in a patient infected by Mycobacterium tuberculosis a higher  
CC risk of being unable to eliminate the bacillus or of developing MDR  
CC tuberculosis. The method is useful for predicting the epidemic character  
CC of a Mycobacterium tuberculosis isolate and/or a selective advantage to  
CC be maintained in the host and/or the acquisition of MDR by the isolate.  
CC The present sequence represents a PCR primer for M. tuberculosis muty,  
CC which is used in the exemplification of the present invention  
SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 439 CCGCGACGATCGCCGCT 458  
Db 1 CCGCGACGATCGCTCGTT 20  
RESULT 242  
AA62333  
ID AA62333 standard; DNA; 20 BP.  
AC AA62333;  
XX  
XX 06-OCT-2003 (first entry)  
DE Human transcription factor-2 gamma antisense oligo, ISIS 128187.  
XX  
XX Transcription factor-2 gamma; TPAP2C; AP-2 gamma; AP2-gamma; AP-2.2;  
XX Str2.2; activating enhancer-binding protein 2 gamma; antisense therapy;  
XX oestrogen receptor factor-1; ERF-1; hyperproliferative disorder; cancer;  
XX breast; colon; developmental disorder; human; phosphorothioate backbone;  
XX antisense; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
XX modified\_base 1..20  
XX FT /\*tag= a  
XX FT /mod\_base= OTHER  
XX FT /note= "Phosphorothioate backbone; All cytidines are 5-  
XX FT methylcytidines"  
XX FT 1..5  
XX FT /\*tag= b  
XX FT /mod\_base= OTHER  
XX FT /note= "2'methoxyethyl nucleotides"  
XX FT 16..20  
XX FT /\*tag= C  
XX FT /mod\_base= OTHER  
XX FT /note= "2'methoxyethyl nucleotides"  
XX  
XX WO2003051308-A2.  
XX  
XX 26-JUN-2003.  
XX  
XX 12-DEC-2002; 2002WO-US040100.

PR 17-DEC-2001; 2001US-00023782.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Coweert LM, Freier SM;  
PI WPI; 2003-569107/53.  
DR  
XX  
XX New antisense compound targeted to a nucleic acid molecule encoding  
PT transcription factor-2 gamma, useful for inhibiting expression of the  
PT nucleic acid, and for treating cancer e.g. breast cancer or colon cancer.  
XX  
XX Example 15; Page 80; 107pp; English.  
XX  
CC The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of transcription factor-2 gamma (TFAP2C).  
CC TFAP2C is also known as AP-2 gamma, AP2-gamma, AP-2.2, Str2.2, activating  
CC enhancer-binding protein 2 gamma, oestrogen receptor factor-1 and ERF-1.  
CC The invention is useful for inhibiting the expression of TFAP2C in cells  
CC or tissues. It is useful for treating an animal having a disease or  
CC condition associated with TFAP2C, e.g., a hyperproliferative disorder  
CC such as cancer e.g. breast cancer or colon cancer and a developmental  
CC disorder. The invention is also useful for diagnostics, therapeutics,  
CC prophylaxis and as research reagents and kits. It is also used in  
CC antisense therapy. The present sequence is an antisense oligonucleotide  
CC targeted to human TPAP2C DNA. This sequence is used to illustrate the  
CC method of the invention  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 1 G; 8 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 1636 CCTACCTTTTGAAAATTAC 1655  
Db 1 CCTACCTTTTCAAGTTTAC 20  
RESULT 243  
ACD44978/C  
ID ACD44978 standard; DNA; 20 BP.  
XX  
XX ACD44978;  
AC  
XX 10-SEP-2003 (first entry)  
DT  
XX  
DE Human SR-BI gene PCR primer #2 for exon 8.  
XX  
XX  
XX Human; ss; scavenger receptor BI; SR-BI; cardiant; anti-lipemic;  
XX high density lipoprotein; HDL; hormone replacement therapy;  
XX postmenopausal female; cardiovascular disorder; coronary heart disease;  
XX atherosclerosis; stroke; ischaemia; restenosis; congestive heart failure;  
XX gangrene; PCR; primer.  
XX  
OS Homo sapiens.  
XX  
XX US2003044782-A1.  
XX  
XX 06-MAR-2003.  
XX  
XX 08-FEB-2001; 2001US-00779152.  
XX  
XX 10-JUL-1997; 97US-00890979.  
XX 27-FEB-1998; 98US-00031626.  
XX  
XX (ACTO/) ACTON S L.  
XX (MCCA/) MCCARTHY J J.  
XX  
XX Acton SL, McCarthy JJ;  
PI WPI; 2003-503489/47.  
XX  
XX

PT Determining if a subject has or is at risk of developing abnormally low  
PT high density lipoprotein level, involves determining identity of allelic  
PT variant of polymorphic region of SR-BI gene of the subject.

PS Example 2; Page 29; 84pp; English.

The invention relates to determining whether a subject has, or is at risk of developing, an abnormally low high density lipoprotein (HDL) level, involves determining the identity of the allelic variant of a polymorphic region of the SR-BI (scavenger receptor BI) gene of the subject, and comparing the allelic variant of the subject with allelic variants associated with abnormally low HDL levels. Also included are a kit for determining whether a subject has, or is at risk of developing, a low HDL level (comprises a probe or primer which is capable of hybridizing to an SR-BI gene, and thus identifying whether the SR-BI gene contains an allelic variant of a polymorphic region which is associated with a low HDL level) and predicting the effect of hormone replacement therapy on the HDL level in a female subject (by identifying one or more allelic variants of the SR-BI gene which are associated with abnormally low HDL levels in females (especially postmenopausal females), thus predicting the effect of hormone replacement therapy on the HDL level in the subject). Also disclosed are methods of treating low HDL levels and resulting cardiovascular disorders (e.g. coronary heart disease, atherosclerosis, stroke, ischaemia, reninosis, congestive heart failure and gangrene) by administering a compound that increases HDL levels, when the subject has been identified as having the common allele at residue 41 of exon 8. The present sequence is a PCR primer used to amplify an exon from the SR-BI gene

Sequence 20 BP; 4 A; 13 C; 1 G; 2 T; 0 U; 0 Other;

Query Match	1.1%	Score 15.2	DB 1	Length 20
Best Local Similarity	85.0%	Pred. No. 3.6e+02		
Matches 17; Conservative	0	Mismatches 3	Indels 0	Gaps 0

```

Qy      1037 GTGGCGGCGGTGTGTAA 1056
          ||||| | ||||| ||
Db      20 GTGGGCTGGGCTGTGCGAA 1

```

## RESULT 244

ID ABZ89567 standard; DNA; 20 BP.

AC ABZ89567;

DT 17-OCT-2003 (first entry)

Human oligonucleotide sequence.

KM Human; antisease; lung dysfunction; nasal airway dysfunction;  
 KM antiinflammatory steroid; ubilunone; antiinflammatory; antiallergic;  
 KM antiasthmatic; hypocensive; immunosuppressive; cytostatic; gene therapy  
 KM antisease gene therapy; respiratory; lung; adenosine sensitivity;  
 KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KM lung inflammation; respiratory disease; ds-

Os Homo sapiens.

PN WO200285308-A2.

PD 31-OCT-2002.

PF 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,  
PI Miller S, Tang L, Shahabuddin S;  
PI

DR WPI; 2003-229219/22.

XX pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ublquinone.

PS Disclosure; SEQ ID NO 4809; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cyostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or creating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published\\_pat\\_sequences](http://ftp.wipo.int/pub/published_pat_sequences)

SQ Sequence 20 BP; 8 A; 1 C; 5 G; 6 T; 0 U; 0 Other;

Query Match	1.1%	Score 15.2	DB 1	Length 20
Best Local Similarity	85.0%	Pred. NC 3.6e+02		
Matches 17, Conservative	0	Mismatches 3	Indels 0	Gaps 0

QY 802 AAGTGTGAATTTGTGTT 821  
|||||  
Db 1 AAGAGCTGAATTATGTGAT 20

## RESULT 245

ID ABZ85312 standard; DNA; 20 BP.

AC ABZ85312;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

KM Human; antisense; lung dysfunction; nasal airway dysfunction;  
KM antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KM antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy  
KM antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KM lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN W0200285308-A2.

PD 31-OCT-2002.

Pf 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,  
PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 554; 872bp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1518 TTTAAAAAGTAAAAA 1537  
DB 20 TCGAAAAAGAAAAA 1  
XX  
RESULT 246  
ABZ85667/C  
ID ABZ85667 standard; DNA; 20 BP.  
XX  
AC ABZ85667;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPICGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandraagra A, Katz E, Pabalan J, Aguilar D,  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 909; 872bp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 0 A; 5 C; 0 G; 15 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1520 AAAAAAGTAAAAAG 1539  
DB 20 AAAAAAGAAAAAGAG 1  
XX  
RESULT 247  
ABZ92865  
ID ABZ92865 standard; DNA; 20 BP.  
XX  
AC ABZ92865;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPICGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandraagra A, Katz E, Pabalan J, Aguilar D,  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.

```
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
PS Disclosure; SEQ ID NO 8107; 872bp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cyostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 18 A; 0 C; 1 G; 1 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1516 AATTAAAAAGTAAAGTAA 1535
Db 1 AAGTAAAAAGTAAAGTAA 20
RESULT 248
ABZ89876 standard; DNA; 20 BP.
ID ABZ89876
AC ABZ89876;
XX
XX 17-OCT-2003 (first entry)
DT
DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
OS
XX WO200285308-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013135.
PF
XX 24-APR-2001; 2001US-0286137P.
PR
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX Nyce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
DR
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```
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
PS Disclosure; SEQ ID NO 5118; 872bp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cyostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 9 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1530 AAGTAAAGGAGGACAGCA 1549
Db 1 AAGTAAAGGAGGACAGCA 20
RESULT 249
ABZ91658 standard; DNA; 20 BP.
ID ABZ91658
AC ABZ91658;
XX
XX 17-OCT-2003 (first entry)
DT
DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
OS
XX WO200285308-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013135.
PF
XX 24-APR-2001; 2001US-0286137P.
PR
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX Nyce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
DR
```

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX Disclosure; SEQ ID NO 6900; 872bp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pcc\_sequences  
XX  
SQ Sequence 20 BP; 15 A; 1 C; 0 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1511 CTGTTAATTAAAAA 1530  
Db 1 CTTTAAAAA 20  
XX  
RESULT 250  
ABZ89703  
ID ABZ89703 standard; DNA; 20 BP.  
XX  
AC ABZ89703;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
OS  
XX WO200285308-A2.  
FN  
XX 31-OCT-2002.  
PD  
XX 23-APR-2002; 2002WO-US013135.  
PF  
XX 24-APR-2001; 2001US-0286137P.  
PR  
XX (EPIG-) EPIGENESIS PHARM INC.  
PA  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI, 2003-229219/22.  
XX

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX Disclosure; SEQ ID NO 4945; 872bp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pcc\_sequences  
XX  
SQ Sequence 20 BP; 16 A; 0 C; 0 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1512 TGTTAATTAAAAA 1531  
Db 1 TTTTAAAAA 20  
XX  
RESULT 251  
ABZ89719  
ID ABZ89719 standard; DNA; 20 BP.  
XX  
AC ABZ89719;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
OS  
XX WO200285308-A2.  
FN  
XX 31-OCT-2002.  
PD  
XX 23-APR-2002; 2002WO-US013135.  
PF  
XX 24-APR-2001; 2001US-0286137P.  
PR  
XX (EPIG-) EPIGENESIS PHARM INC.  
PA  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI, 2003-229219/22.  
XX

XX pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX Disclousre; SEQ ID NO 4961; 872bp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to, adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX  
QY 1300 AATCTATTATTTTATTTC 1319  
||| ||||| |||||  
1 AATTTTATTTTATTTTATTTTC 20  
XX  
RESULT 252  
ABD21542/C  
ID ABD21542 standard; DNA; 20 BP.  
XX  
AC ABD21542;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE S100 calcium binding protein A2-derived oligo SEQ ID 554.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
XX  
XX WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,  
PI Miller S, Tang L, Shahbuddin S.

XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
XX  
PS Claim 15; SEQ ID NO 554; 763bp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cyostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX  
QY 1518 TTAATAAAAAAAAAAGTAAA 1537  
||| ||||| |||||  
20 TGAATAAAAAAAAAAAAAAAA 1  
XX  
Db  
XX  
RESULT 253  
ABD21897/C  
ID ABD21897 standard; DNA; 20 BP.  
XX  
AC ABD21897;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE Human stannocalcin-derived oligo SEQ ID 909.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
XX  
XX



PN WO200285309-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013143.  
XX  
XX 24-APR-2001; 2001US-0286036P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
XX  
XX Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX Miller S, Tang L, Shahbuddin S;  
XX WPI; 2003-093058/08.  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
XX oligonucleotide containing less percentage of adenosine, targeted to  
XX nucleic acids associated with lung airway or lung dysfunction, and  
XX bronchodilating agent.  
XX  
XX Claim 15; SEQ ID NO 909; 763pp; English.  
XX  
XX This invention describes a novel composition (a) a first active agent,  
XX comprising oligonucleotides, effective for alleviating  
XX bronchoconstriction, respiratory tract inflammation, allergies and  
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
XX surfactant depletion or hyposecretion, when administered to a mammal. The  
XX oligonucleotides are derived from a gene encoding or regulating  
XX expression of a target polypeptide associated with lung airway or lung  
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
XX The invention also describes a kit, that comprises: (a) a delivery  
XX device, in separate containers, (b) the oligonucleotides, (c)  
XX instructions for adding a carrier and for use of the kit. The composition  
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
XX beta-adrenergic agonist. The composition is useful for preventing or  
XX treating a respiratory, lung or malignant disease. The administered  
XX composition comprises oligo and is administered to reduce the production  
XX or availability, or to increase the degradation of the target mRNA or to  
XX reduce the amount of target polypeptide present in the lungs. The  
XX pulmonary obstruction, and/or bronchoconstriction and/or lung  
XX inflammation, allergies and/or surfactant hypoproduction are associated  
XX with a disease or condition such as pulmonary vasoconstriction,  
XX inflammation, allergies, asthma, impeded respiration, respiratory  
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
XX hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary  
XX transplantation rejection, pulmonary infections, bronchitis or cancer.  
XX The reduced adenosine content of the anti-sense oligos corresponding to  
XX thymidines present in the target RNA serves to prevent the breakdown of  
XX the oligonucleotides into products that free adenosine into the system  
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
XX prevent any unwanted effects due to it  
XX  
XX Sequence 20 BP; 0 A; 5 C; 0 G; 15 T; 0 U; 0 Other;  
SQ  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1520 AAAAAAAAAAGTAAAGG 1539  
Db 20 AAAAAAAAAAGAAAGAGG 1  
RESULT 254  
ABD25797  
XX ABD25797 standard; DNA; 20 BP.  
XX  
XX ABD25797;  
XX  
XX 29-JUL-2004 (first entry)  
XX  
XX A1085559-derived oligonucleotide SEQ ID 4809.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hyperinflation;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; seq. primer.  
XX  
XX Homo sapiens.  
XX  
XX WO200285309-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013143.  
XX  
XX 24-APR-2001; 2001US-0286036P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
XX  
XX Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX Miller S, Tang L, Shahbuddin S;  
XX WPI; 2003-093058/08.  
XX  
XX This invention describes a novel composition (a) a first active agent,  
XX comprising oligonucleotides, effective for alleviating  
XX bronchoconstriction, respiratory tract inflammation, allergies and  
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
XX surfactant depletion or hyposecretion, when administered to a mammal. The  
XX oligonucleotides are derived from a gene encoding or regulating  
XX expression of a target polypeptide associated with lung airway or lung  
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
XX The invention also describes a kit, that comprises: (a) a delivery  
XX device, in separate containers, (b) the oligonucleotides, (c)  
XX instructions for adding a carrier and for use of the kit. The composition  
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
XX beta-adrenergic agonist. The composition is useful for preventing or  
XX treating a respiratory, lung or malignant disease. The administered  
XX composition comprises oligo and is administered to reduce the production  
XX or availability, or to increase the degradation of the target mRNA or to  
XX reduce the amount of target polypeptide present in the lungs. The  
XX pulmonary obstruction, and/or bronchoconstriction and/or lung  
XX inflammation, allergies and/or surfactant hypoproduction are associated  
XX with a disease or condition such as pulmonary vasoconstriction,  
XX inflammation, allergies, asthma, impeded respiration, respiratory  
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
XX hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary  
XX transplantation rejection, pulmonary infections, bronchitis or cancer.  
XX The reduced adenosine content of the anti-sense oligos corresponding to  
XX thymidines present in the target RNA serves to prevent the breakdown of  
XX the oligonucleotides into products that free adenosine into the system  
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
XX prevent any unwanted effects due to it  
XX  
XX Sequence 20 BP; 8 A; 1 C; 5 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 802 AAGTGCATTTGTGTT 821  
|||||

Db 1 AAAGAGCTGAATTATGAT 20

RESULT 255

ABD25949

ID ABD25949 standard; DNA, 20 BP.

XX

AC ABD25949;

XX

DT 29-JUL-2004 (first entry)

XX

DE AA906703-derived oligonucleotide SEQ ID 4961.

XX

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

XX

OS Homo sapiens.

OS

PN WO200285309-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002MO-US03143.

XX

PR 24-APR-2001; 2001US-0286036P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Ngye JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; Miller S, Tang L, Shanabuddin S;

XX

DR WP1; 2003-093058/08.

XX

PT Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.

PT

XX

PS Claim 15; SEQ ID NO 4961; 763bp; English.

XX

XX This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of

CC	the oligonucleotides into products that free adenosine into the system
CC	e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC	prevent any unwanted effects due to it
XX	
SQ	Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
Oy	Query Match 1.1%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.6e+02; Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0
Dd	1300 AATCATTTTATTATTTTC 1319       1 AATTTTTTTTTTTTTTTTC 20
RESULT 256	
ID	ABD27888 standard; DNA; 20 BP.
AC	ABD27888;
XX	
DT	29-JUL-2004 (first entry)
XX	
DE	AA258336-derived oligonucleotide SEQ ID 6900.
XX	
KW	Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW	respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW	surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW	analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW	beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW	respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW	emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX	pulmonary transplantation rejection; ss; primer.
OS	Homo sapiens.
FN	WO200285309-A2.
PD	31-OCT-2002.
PF	23-APR-2002; 2002MO-USO13143.
PR	24-APR-2001; 2001US-0286036P.
PA	(EPIG-) EPIGENESIS PHARM INC.
PI	Nyge JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PT	Miller S, Tang L, Shahabuddin S;
WP1	2003-093058/08.
PT	Pharmaceutical composition for treating asthma, has antisease
PT	oligonucleotide containing less percentage of adenosine, targeted to
PT	nucleic acids associated with lung airway or lung dysfunction, and
PT	bronchodilating agent.
PS	Claim 15; SEQ ID NO 6900; 763bp; English.
XX	
CC	This invention describes a novel composition (a) a first active agent,
CC	comprising oligonucleotides, effective for alleviating
CC	bronchoconstriction, respiratory tract inflammation, allergies and
CC	reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC	surfactant depletion or hyposecretion, when administered to a mammal. The
CC	oligonucleotides are derived from a gene encoding or regulating
CC	expression of a target polypeptide associated with lung airway or lung
CC	dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC	The invention also describes a kit, that comprises: (a) a delivery
CC	device, in separate containers, (b) the oligonucleotides, (c)
CC	instructions for adding a carrier and for use of the kit. The composition
CC	of the invention has anti-allergic, antiinflammatory, antiasthmatic,
CC	analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC	beta-adrenergic agonist. The composition is useful for preventing or
CC	treating a respiratory, lung or malignant disease. The administered

```
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasocostriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hyperension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transpiration rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 15 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1511 CTGTTAATTAATAAAAAAAAA 1530
DB 1 CTTTAAAAAAAAAAAAAAAAA 20
RESULT 257
ABD29095
ID ABD29095 standard; DNA; 20 BP.
XX
AC ABD29095;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA679352-derived oligonucleotide SEQ ID 8107.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasocostriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIC-) EPICGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 8107; 763bp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
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CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasocostriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hyperension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transpiration rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 18 A; 0 C; 1 G; 1 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1516 AATTAAAAAAAAAAAGTAA 1535
DB 1 AAGTAAAAAAAAAAAAAAAAA 20
RESULT 258
ABD26106
ID ABD26106 standard; DNA; 20 BP.
XX
AC ABD26106;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA463249-derived oligonucleotide SEQ ID 5118.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasocostriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIC-) EPICGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,
XX Miller S, Tang L, Shahabuddin S;
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DR WPI; 2003-093056/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 5118; 763bp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
XX Sequence 20 BP; 9 A; 3 C; 7 G; 1 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1530 AAGTAAAGGAGGACGCA 1549  
DB 1 AGTAAAGGAGGACGCA 20  
XX  
RESULT 259  
ADH66257/C  
ID ADH66257 standard; DNA; 20 BP.  
XX  
AC ADH66257;  
XX  
DT 25-MAR-2004 (first entry)  
XX  
DE Human glucocorticoid receptor-specific antisense oligonucleotide #3091.  
XX  
KW antisense oligonucleotide; glucocorticoid receptor; infection;  
KW inflammation; tumour formation; diabetes; obesity;  
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;  
KW phosphorochioate backbone; 2'-methoxyethyl; 2'-MOE.  
XX  
OS Homo sapiens.  
XX  
XX WO2003099215-A2.  
XX  
XX 04-DEC-2003.  
XX  
XX 20-MAY-2003; 2003WO-US016084.  
XX  
PF

XX  
XX 20-MAY-2002; 2002US-0381857P.  
XX  
PA (PHAA ) PHARMACIA CORP.  
XX  
XX Crosby SD, Nalseth AE;  
XX  
XX WPI; 2004-035034/03.  
XX  
XX New antisense compound targeted to a nucleic acid molecule encoding  
XX mammalian glucocorticoid receptor, useful for treating diabetes, obesity,  
XX cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.  
XX  
PS Claim 4; SEQ ID NO 3091; 985bp; English.  
XX  
CC The invention comprises an antisense oligonucleotides that are targeted  
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The  
CC antisense oligonucleotides of the invention are useful for preventing or  
CC delaying infection, inflammation or tumour formation. The antisense  
CC oligonucleotides are also useful for treating diabetes, obesity, The  
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The  
CC present DNA sequence represents an antisense oligonucleotide that targets  
CC the human glucocorticoid receptor gene. NOTE: The present sequence  
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorochioate backbone.  
XX  
XX Sequence 20 BP; 1 A; 3 C; 0 G; 16 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1522 AAAAAAAAAAGTAAAGGCA 1541  
DB 20 AAGAAAAAAAAATAAAGGCA 1  
XX  
RESULT 260  
ADH66380/C  
ID ADH66380 standard; DNA; 20 BP.  
XX  
AC ADH66380;  
XX  
DT 25-MAR-2004 (first entry)  
XX  
DE Human glucocorticoid receptor-specific antisense oligonucleotide #3214.  
XX  
KW antisense oligonucleotide; glucocorticoid receptor; infection;  
KW inflammation; tumour formation; diabetes; obesity;  
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;  
KW phosphorochioate backbone; 2'-methoxyethyl; 2'-MOE.  
XX  
OS Homo sapiens.  
XX  
XX WO2003099215-A2.  
XX  
XX 04-DEC-2003.  
XX  
XX 20-MAY-2003; 2003WO-US016084.  
XX  
XX 20-MAY-2002; 2002US-0381857P.  
XX  
XX (PHAA ) PHARMACIA CORP.  
XX  
XX Crosby SD, Nalseth AE;  
XX  
XX WPI; 2004-035034/03.  
XX  
XX New antisense compound targeted to a nucleic acid molecule encoding  
XX mammalian glucocorticoid receptor, useful for treating diabetes, obesity,  
XX cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.  
XX  
PS Claim 4; SEQ ID NO 3214; 985bp; English.  
XX  
XX

CC The invention comprises an antisense oligonucleotide that are targeted  
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The  
CC antisense oligonucleotide of the invention are useful for preventing or  
CC delaying infection, inflammation or tumour formation. The antisense  
CC oligonucleotides are also useful for treating diabetes, obesity,  
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The  
CC present DNA sequence represents an antisense oligonucleotide that targets  
CC the human glucocorticoid receptor gene. NOTE: The present sequence  
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.  
XX  
SQ Sequence 20 BP; 2 A; 1 C; 1 G; 16 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 1512 TGTAAATTAAAAAAA 1531  
Db 20 TGTCAAAAAAAAAAAAAA 1  
RESULT 261  
ADH67400/c  
ID ADH67400 standard; DNA; 20 BP.  
XX  
AC ADH67400;  
XX  
DT 25-MAR-2004 (first entry)  
XX  
DE Human glucocorticoid receptor-specific antisense oligonucleotide #4234.  
XX  
KW antisense oligonucleotide; glucocorticoid receptor; infection;  
KW inflammation; tumour formation; diabetes; obesity;  
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;  
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.  
XX  
OS Homo sapiens.  
XX  
FN WO2003099215-A2.  
XX  
PD 04-DEC-2003.  
XX  
PF 20-MAY-2003; 2003WO-US016084.  
XX  
PR 20-MAY-2002; 2002US-0381857P.  
XX  
PA (PHAA ) PHARMACIA CORP.  
XX  
PI Crosby SD, Naleeth AE;  
XX  
DR WPI; 2004-035034/03.  
XX  
PT New antisense compound targeted to a nucleic acid molecule encoding  
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,  
PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.  
XX  
PS Claim 4; SEQ ID NO 4234; 985bp; English.  
XX  
CC The invention comprises an antisense oligonucleotide that are targeted  
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The  
CC antisense oligonucleotide of the invention are useful for preventing or  
CC delaying infection, inflammation or tumour formation. The antisense  
CC oligonucleotides are also useful for treating diabetes, obesity,  
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The  
CC present DNA sequence represents an antisense oligonucleotide that targets  
CC the human glucocorticoid receptor gene. NOTE: The present sequence  
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.  
XX  
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Oy 1518 TTAAGAAAAAGTAAAA 1537  
Db 20 TCAAGAAAAAGTAAAAA 1  
RESULT 262  
ADH6542/c  
ID ADH6542 standard; DNA; 20 BP.  
XX  
AC ADH6542;  
XX  
DT 25-MAR-2004 (first entry)  
XX  
DE Human glucocorticoid receptor-specific antisense oligonucleotide #3376.  
XX  
KW antisense oligonucleotide; glucocorticoid receptor; infection;  
KW inflammation; tumour formation; diabetes; obesity;  
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;  
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.  
XX  
OS Homo sapiens.  
XX  
FN WO2003099215-A2.  
XX  
PD 04-DEC-2003.  
XX  
PF 20-MAY-2003; 2003WO-US016084.  
XX  
PR 20-MAY-2002; 2002US-0381857P.  
XX  
PA (PHAA ) PHARMACIA CORP.  
XX  
PI Crosby SD, Naleeth AE;  
XX  
DR WPI; 2004-035034/03.  
XX  
PT New antisense compound targeted to a nucleic acid molecule encoding  
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,  
PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.  
XX  
PS Claim 4; SEQ ID NO 3376; 985bp; English.  
XX  
CC The invention comprises an antisense oligonucleotide that are targeted  
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The  
CC antisense oligonucleotide of the invention are useful for preventing or  
CC delaying infection, inflammation or tumour formation. The antisense  
CC oligonucleotides are also useful for treating diabetes, obesity,  
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The  
CC present DNA sequence represents an antisense oligonucleotide that targets  
CC the human glucocorticoid receptor gene. NOTE: The present sequence  
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.  
XX  
SQ Sequence 20 BP; 1 A; 3 C; 1 G; 15 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 1520 AAAAAAAGTAAAAAG 1539  
Db 20 ACAAAGAAAAAATAAAAAG 1  
RESULT 263  
ADJ46173/c  
ID ADJ46173 standard; DNA; 20 BP.  
XX  
AC ADJ46173;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Human CD36L1 genotyping PCR primer #16.



```
XX AC ADK81318;
XX XX
XX DT 20-MAY-2004 (first entry)
XX XX
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #8652.
XX XX
XX KW Nav1.3; Analgesic; Nocotropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
XX KW infantile epilepsy; ataxia; ss.
XX XX
XX OS Synthetic.
XX OS
XX PN WO2004016754-A2.
XX XX
XX PD 26-FEB-2004.
XX XX
XX PF 14-AUG-2003; 2003WO-US025465.
XX XX
XX PR 14-AUG-2002; 2002US-0403416P.
XX XX
XX PA (PHAA ) PHARMACIA CORP.
XX XX
XX PI Roberda SL;
XX XX
XX DR WPI; 2004-203785/19.
XX XX
XX PT New antisense compound targeted to a nucleic acid molecule encoding
XX PT Nav1.3, useful for treating a disease or condition associated
XX PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX PT disorder, or ataxia.
XX XX
XX PS Claim 4; SEQ ID NO 8652; 417pp; English.
XX XX
XX CC The present invention relates to an antisense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antisense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'WO3 wings and a deoxy gap. Used during the antisense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX XX
XX SQ Sequence 20 BP; 12 A; 2 C; 2 G; 4 T; 0 U; 0 Other;
XX XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 3.6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX XX
XX QY 1248 TTGCTTTGATTTTAAATCA 1267
XX DB 20 TTGCTTTGATTTTAAATCA 1
XX XX
XX RESULT 266
XX ADK74442/C
XX ID ADK74442 standard; DNA; 20 BP.
XX XX
XX AC ADK74442;
XX XX
XX DT 20-MAY-2004 (first entry)
XX XX
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1776.
XX XX
XX KW Nav1.3; Analgesic; Nocotropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
XX KW infantile epilepsy; ataxia; ss.
```

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XX OS Synthetic.
XX OS
XX PN WO2004016754-A2.
XX XX
XX PD 26-FEB-2004.
XX XX
XX PF 14-AUG-2003; 2003WO-US025465.
XX XX
XX PR 14-AUG-2002; 2002US-0403416P.
XX XX
XX PA (PHAA ) PHARMACIA CORP.
XX XX
XX PI Roberda SL;
XX XX
XX DR WPI; 2004-203785/19.
XX XX
XX PT New antisense compound targeted to a nucleic acid molecule encoding
XX PT Nav1.3, useful for treating a disease or condition associated
XX PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX PT disorder, or ataxia.
XX XX
XX PS Claim 4; SEQ ID NO 1776; 417pp; English.
XX XX
XX CC The present invention relates to an antisense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antisense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'WO3 wings and a deoxy gap. Used during the antisense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX XX
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 3.6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX XX
XX QY 1518 TTAATAAAAAAAAAAGTAAA 1537
XX DB 20 TCAAAAAAAAAAAAAAAAAAAAA 1
XX XX
XX RESULT 267
XX ADK78029
XX ID ADK78029 standard; DNA; 20 BP.
XX XX
XX AC ADK78029;
XX XX
XX DT 20-MAY-2004 (first entry)
XX XX
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #5363.
XX XX
XX KW Nav1.3; Analgesic; Nocotropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
XX KW infantile epilepsy; ataxia; ss.
XX XX
XX OS Synthetic.
XX OS
XX PN WO2004016754-A2.
XX XX
XX PD 26-FEB-2004.
XX XX
XX PF 14-AUG-2003; 2003WO-US025465.
XX XX
XX PR 14-AUG-2002; 2002US-0403416P.
```

```
XX (PHAA ) PHARMACIA CORP.
PA
XX Roberda SL;
PI
XX WPI; 2004-203785/19.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 5363; 417bp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 8 A; 2 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1165 AGTATTGTTGAAATACGCA 1184
Db 1 AGTATTGTTAAACACGCA 20
RESULT 268
ADLS9022
ID ADLS9022 standard; DNA; 20 BP.
XX
XX ADLS9022;
XX
XX 03-JUN-2004 (first entry)
XX
DE Human ESM-1 antisense oligonucleotide seqid 1271.
XX
XX cyostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
XX gene therapy; endothelial specific molecule-1; ESM-1;
XX ESM-1 related disorder; diabetes; cancer; ischemia; reperfusion injury;
XX angiogenic disorder; immunological disorder; cardiovascular disorder;
XX neurological disorder; antisense technology; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone. All cytidine
FT residues are 5-methylcytidines"
FT modified_base
FT 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
```

```
PN NO2004021978-A2.
XX
XX PD 18-MAR-2004.
XX
XX PF 19-AUG-2003; 2003MO-US025833.
XX
XX PR 19-AUG-2002; 2002US-0404495P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Weinstein EJ, Griggs DW;
XX
XX WPI; 2004-248358/23.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX PT encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
XX PT composition for treating e.g., diabetes, cancer or cardiovascular
XX PT disorder.
XX
PS Claim 3; SEQ ID NO 1271; 555bp; English.
XX
XX The invention describes a new antisense compound, having a sequence
XX comprising 8-30 bp targeted to a nucleic acid encoding endothelial
XX specific molecule-1 (ESM-1), that specifically hybridizes with the
XX nucleic acid ESM-1 and inhibits its expression. Also described are: a
XX composition; inhibiting the expression of ESM-1 in cells or tissues; and
XX CC treating an animal having a disease or condition associated with ESM-1.
XX CC The compound is useful for preparing a composition for treating diabetes,
XX cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
XX CC cardiovascular or neurological disorder. This sequence represents an
XX antisense oligonucleotide that can be used to modulate expression of
XX endothelial specific molecule-1 (ESM-1).
XX
SQ Sequence 20 BP; 8 A; 5 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1201 GTCCTTTAAACCAATCCT 1220
Db 1 GTCCTTTAAACCAAACT 20
RESULT 269
ADM15109/C
ID ADM15109 standard; DNA; 20 BP.
XX
XX ADM15109;
XX
XX 01-JUL-2004 (first entry)
XX
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO.1296.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsome1 prostaglandin E2 synthase inhibitor; cyostatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; neotropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
FH 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT
```



```
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gliese JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding MPGS-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 1296; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (MPGS-1). The
XX human MPGS-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX MPGS-1, which specifically hybridise with the nucleic acid MPGS-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX MPGS-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with MPGS-1. MPGS-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulatory, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as MPGS-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with MPGS-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 10 A; 2 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. NO. 3.6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1309 TTTTATTTTCAGACAGAGA 1328
XX DB 20 TTTTATTTTCAGACAGAGA 1
XX
XX RESULT 270
XX ADM15020/C
XX ID ADM15020 standard; DNA; 20 BP.
XX
XX ADM15020;
XX
XX AD1-2004 (first entry)
XX
XX Human MPGS-1 chimeric antisense oligonucleotide SEQ ID NO:1207.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; MPGS-1; MPGS-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
```

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KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
XX
XX Synthetic.
XX
XX Key
XX Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX
XX modified_base 16..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gliese JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding MPGS-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 1207; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (MPGS-1). The
XX human MPGS-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX MPGS-1, which specifically hybridise with the nucleic acid MPGS-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX MPGS-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with MPGS-1. MPGS-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulatory, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as MPGS-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with MPGS-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 11 A; 2 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. NO. 3.6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1308 TTTTATTTTCAGACAGAG 1327
XX ||||| ||||| |||||
```



CC necrosis factor- $\alpha$ , soluble vascular cell adhesion molecule (sVCAM),  
CC soluble intervascular adhesion molecule (sICAM), E-selectin, matrix  
CC metalloproteinase type-1, matrix metalloproteinase type-2, matrix  
CC metalloproteinase type-3 and matrix metalloproteinase type-9; in an  
CC individual having increased low density lipoprotein (LDL) cholesterol  
CC and/or decreased high density lipoprotein (HDL) cholesterol; in an  
CC individual having increased leukotriene synthesis; in an individual  
CC having previous myocardial infarction or acute coronary syndrome (ACS)  
CC event, stable angina; or in an individual who has atherosclerosis or who  
CC requires treatment to restore blood flow in arteries. (M1) is useful for  
CC treating an individual suffering from acute coronary syndrome chosen from  
CC unstable angina, non-ST-elevation myocardial infarction (NSTEMI) and ST-  
CC elevation myocardial infarction (STEMI). The human FLAP gene is located  
CC on chromosome 13, more specifically to 13q12. The present sequence  
CC represents a microsatellite marker used in the exemplification of the  
CC present invention.  
XX  
SQ Sequence 20 BP; 9 A; 10 C; 1 G; 0 T; 0 U; 0 Other;  
  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
Qy 546 GTGGGTGGCTGTGCTGGCT 565  
Db 20 GTGTGTGTGTGTGTGTGCT 1  
  
RESULT 273  
ADN58960  
ID ADN58960 standard; DNA; 20 BP.  
XX  
AC ADN58960;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Human B7H target sequence ISIS 123577.  
XX  
KW B7H; autoimmune disease; ss; human.  
XX  
OS Homo sapiens.  
XX  
PN US2004102398-A1.  
XX  
PD 27-MAY-2004.  
XX  
PF 23-NOV-2002; 2002US-00303420.  
XX  
PR 23-NOV-2002; 2002US-00303420.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Monia BP, Dobie KW;  
XX  
DR WPI; 2004-399728/37.  
XX  
PT New compound targeted to a nucleic acid molecule encoding B7H and  
XX inhibits expression of B7H, useful for modulating the expression of B7H  
XX or for diagnosing or treating, e.g. autoimmune disease.  
XX  
PS Example 16; SEQ ID NO 211; 97pp; English.  
XX  
CC The invention relates to a compound targeted to a nucleic acid molecule  
XX encoding B7H, where the compound specifically hybridizes with the nucleic  
XX acid molecule encoding B7H and inhibits the expression of B7H. The  
XX compound is useful for modulating the expression of B7H. It is also  
XX useful for diagnosing or treating diseases associated with expression of  
XX B7H, e.g. an autoimmune disease. The present sequence represents a human  
XX B7H target sequence.  
SQ Sequence 20 BP; 2 A; 4 C; 9 G; 5 T; 0 U; 0 Other;  
  
Query Match 1.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
Qy 361 AGGGGCTGTGCTGTGCTC 380  
Db 1 AGGTGCTGTGGCTGTGAGTC 20  
  
RESULT 274  
ADN58812/C  
ID ADN58812 standard; DNA; 20 BP.  
XX  
AC ADN58812;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Human B7H antisense oligonucleotide ISIS 205923.  
XX  
KW B7H; autoimmune disease; ss; antisense; human.  
XX  
OS Homo sapiens.  
XX  
OS Synthetic.  
XX  
PN US2004102398-A1.  
XX  
PD 27-MAY-2004.  
XX  
PF 23-NOV-2002; 2002US-00303420.  
XX  
PR 23-NOV-2002; 2002US-00303420.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Monia BP, Dobie KW;  
XX  
DR WPI; 2004-399728/37.  
XX  
PT New compound targeted to a nucleic acid molecule encoding B7H and  
XX inhibits expression of B7H, useful for modulating the expression of B7H  
XX or for diagnosing or treating, e.g. autoimmune disease.  
XX  
PS Example 15; SEQ ID NO 63; 97pp; English.  
XX  
CC The invention relates to a compound targeted to a nucleic acid molecule  
XX encoding B7H, where the compound specifically hybridizes with the nucleic  
XX acid molecule encoding B7H and inhibits the expression of B7H. The  
XX compound is useful for modulating the expression of B7H. It is also  
XX useful for diagnosing or treating diseases associated with expression of  
XX B7H, e.g. an autoimmune disease. The present sequence represents a human  
XX B7H antisense oligonucleotide.  
SQ Sequence 20 BP; 5 A; 9 C; 4 G; 2 T; 0 U; 0 Other;  
  
Query Match 1.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
Qy 361 AGGGGCTGTGCTGTGCTC 380  
Db 20 AGGTGCTGTGGCTGTGAGTC 1  
  
RESULT 275  
ADP78311/C  
ID ADP78311 standard; DNA; 20 BP.  
XX  
AC ADP78311;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Chimeric phosphorothioate oligonucleotide #2110.  
XX  
KW GFAT; Antidiabetic; Cardiant;

```
KM Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
KM reperfusion; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FT modified_base 1..4
FT /tag= a
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
FT modified_base 17..20
FT /tag= b
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
XX
XX WO2004035763-A2.
XX 29-APR-2004.
XX
XX 02-OCT-2003; 2003WO-US033332.
XX
XX 17-OCT-2002; 2002US-0419268P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Brochat KO, Crosby SD;
XX
XX WPI; 2004-348453/32.
XX
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX ischemia/reperfusion injury.
XX
XX Claim 4; SEQ ID NO 2110; 175bp; English.
XX
XX The present invention relates to a compound which specifically hybridizes
XX with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX modulating the expression of GFAT, and which comprise any of the 3063
XX sequences of 20 base pairs, given in the specification. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX They are also useful in research and diagnostics for modulating the
XX expression of GFAT. The present sequence represents a chimeric
XX phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX oligonucleotides inhibit human GFAT expression.
XX
XX Sequence 20 BP; 14 A; 2 C; 1 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1246 TCTTTGTTTGTGTTTAAAT 1265
Db 20 TTTCGTTTGTGTTTAAAT 1
RESULT 276
ADP69305/C
ID ADP69305 standard; DNA; 20 BP.
XX
XX ADP69305;
AC
XX 09-SEP-2004 (first entry)
DT
XX
XX Human mitorNERT-specific antisense oligonucleotide #199.
DE
XX
XX human; antisense oligonucleotide; mitochondrial membrane;
KM insulin sensitizing antidiabetic thiazolidinediones; mitorNERT; diabetes;
KM immunological disorder; cardiovascular disorder; including hypertension;
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```
KM neurological disorders; ischaemia; reperfusion; ss;
KM 2'-methoxyethyl gapmer; 2'-MOE gapmer; phosphorothioate backbone.
XX
XX Homo sapiens.
OS
XX
XX WO2004053060-A2.
XX
XX 24-JUN-2004.
XX
XX 25-NOV-2003; 2003WO-US037621.
XX
XX 06-DEC-2002; 2002US-0431529P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Colca JR;
XX
XX WPI; 2004-468936/44.
XX
XX New antisense oligonucleotides encoding mitorNERT, useful for modulating
XX mitorNERT expression or for treating diseases associated with mitorNERT,
XX e.g. diabetes, immunological disorders or cardiovascular disorders.
XX
XX Claim 4; SEQ ID NO 199; 226bp; English.
XX
XX The invention comprises antisense oligonucleotides that are targeted to
XX the nucleic acids encoding a family of human proteins from mitochondrial
XX membranes, which bind insulin sensitizing, antidiabetic
XX thiazolidinediones (referred to as: mitorNERT). The antisense
XX oligonucleotides of the invention are useful for modulating mitorNERT
XX expression and for treating diseases or conditions associated with
XX mitorNERT, such as: diabetes, immunological disorders, cardiovascular
XX disorders including hypertension, neurological disorders, and
XX ischaemia/reperfusion injuries. The present DNA sequence represents a
XX mitorNERT-specific antisense oligonucleotide of the invention. NOTE: The
XX present sequence is a 2'-methoxyethyl (2'-MOE) gapmer with a
XX phosphorothioate backbone.
XX
XX Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1518 TTAAAAAAGTAAAA 1537
Db 20 TTAAACAAAAA 1
RESULT 277
ADP84381/C
ID ADP84381 standard; DNA; 20 BP.
XX
XX ADP84381;
AC
XX 23-SEP-2004 (first entry)
DT
XX
XX 5' donor site at the exon 19 splice junction of human AAI1 DNA.
DE
XX
XX ss; AST-1; asthma; IGE mediated disease; human; GPR;
KM G-protein coupled receptor for asthma susceptibility; AAI1;
KM asthma associated alternatively spliced gene 1;
KM chronic obstructive pulmonary disease; cancer; rhinitis; dermatitis;
KM cyostatic; antiasthmatic; transgenic; asthma locus-1.
XX
XX Homo sapiens.
OS
XX
XX WO2004056866-A1.
XX
XX 08-JUL-2004.
XX
XX 19-DEC-2003; 2003WO-F1000973.
XX
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PR 20-DEC-2002; 2002US-0435846P.
PR 03-JAN-2003; 2003US-0437895P.
PR 26-MAR-2003; 2003US-0458767P.
PR 09-JUL-2003; 2003US-0486000P.
XX
XX (GENE-) GENES OX.
PA
XX Laitinen T, Kere J, Laitinen LA, Polvi A, Maekelae S, Vendelin J;
PI Pulkinen V, Salmikangas P;
XX
XX WPI; 2004-500286/47.
DR
XX New GPR4 polypeptides, useful in preparing a composition for diagnosing,
PT treating or preventing asthma, other IGE-mediated disease, chronic
PT obstructive pulmonary disease or cancer.
XX
XX Example 7; Page 83; 265pp; English.
XX
XX This invention relates to the identification of a novel susceptibility
XX locus AST-1 for asthma and other IGE mediated diseases mapped to the
XX human chromosome 7p14-p15. Specifically, it refers to two overlapping
XX genes namely GPR4 (G-protein coupled receptor for asthma susceptibility)
XX and AA01 (asthma associated alternatively spliced gene 1). The present
XX invention describes identifying single nucleotide polymorphisms, as well
XX as insertion or deletion polymorphisms, occurring at different positions
XX in the AST-1 locus, and furthermore providing vectors, host cells,
XX primers and probes in order to determine the status of an individual.
XX Accordingly, it provides a kit to diagnose or assess predisposition to
XX asthma, chronic obstructive pulmonary disease or cancer and other IGE
XX mediated diseases including rhinitis and dermatitis, such that derived
XX pharmaceutical compositions exhibit cytostatic and antiasthmatic
XX activities. Furthermore, it provides a transgenic animal comprising the
XX asthma locus-1 (AST-1) DNA. This oligonucleotide sequence is a 5' splice
XX junction of the human AA01 gene, given in table 11 of the invention.
XX
XX Sequence 20 BP; 12 A; 1 C; 0 G; 7 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 3.6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY
XX 1252 TTTTGTGTTTTCATCAGATA 1271
XX |||||
XX 20 TTTTATTTTTCATGAAA 1
Db
XX
XX RESULT 278
XX AA075729
XX ID AA075729 standard; DNA; 21 BP.
XX
XX AA075729;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
XX
```

```
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX cDNA double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESQ files AA075547-075798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY
XX 1246 TTTTGTGTTTTCAT 1265
XX |||||
XX 1 TTTTGTGTTTTCAT 20
Db
XX
XX RESULT 279
XX ADK01284
XX ID ADK01284 standard; DNA; 21 BP.
XX
XX ADK01284;
AC
XX
XX 06-MAY-2004 (first entry)
DT
XX
XX Rat DNA microarray capture oligonucleotide #4.
DE
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KM blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
OS
XX
XX DE10208794-A1.
FN
XX
XX 04-SEP-2003.
PD
XX
XX 28-FEB-2002; 2002DE-01008794.
PF
XX
XX 28-FEB-2002; 2002DE-01008794.
PR
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
PA
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
PI
XX
XX WPI; 2003-714082/68.
DR
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
XX Example; Page 4; 8pp; German.
PS
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly looked nucleic acids (tNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
```

CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.

XX  
SQ Sequence 21 BP, 2 A, 0 C, 0 G, 19 T, 0 U, 0 Other;

Query Match 1.1%, Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1246 TCTTTGTTTGTGTTTAAAT 1265  
DB 2 TTTT TTTT TTTT TTTT TTTTAAAT 21

RESULT 280  
AAQ75728 ID AAQ75728 standard; DNA; 21 BP.  
XX  
AC AAQ75728;  
XX  
DT 04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
KM Analysis; gene expression; reverse transcription; primer; cDNA;  
KW aggregate; restriction enzyme; ss.  
XX  
OS Synthetic.  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
DR WPI; 1995-018287/03.  
XX  
PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.  
XX  
PS Disclosure; Page 8; 11pp; Japanese.  
XX  
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENESSEQ files AAQ75547-Q75798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily

XX  
SQ Sequence 21 BP, 3 A, 0 C, 0 G, 18 T, 0 U, 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1246 TCTTTGTTTGTGTTTAAAT 1265  
DB 1 TTTT TTTT TTTT TTTT TTTTAAAT 20

RESULT 281  
AAQ75727 ID AAQ75727 standard; DNA; 21 BP.  
XX  
AC AAQ75727;  
XX  
DT 04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.  
XX  
KM Analysis; gene expression; reverse transcription; primer; cDNA;  
KW aggregate; restriction enzyme; ss.  
XX  
OS Synthetic.  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.  
XX  
PF 16-APR-1993; 93JP-00112515.  
XX  
PR 16-APR-1993; 93JP-00112515.  
XX  
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
DR WPI; 1995-018287/03.  
XX  
PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.  
XX  
PS Disclosure; Page 8; 11pp; Japanese.  
XX  
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENESSEQ files AAQ75547-Q75798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
CC method can be used to analyse gene expression rapidly and easily

XX  
SQ Sequence 21 BP, 2 A, 0 C, 1 G, 18 T, 0 U, 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1246 TCTTTGTTTGTGTTTAAAT 1265  
DB 1 TTTT TTTT TTTT TTTT TTTTAAAT 20

RESULT 282  
AAQ73754 ID AAQ73754 standard; DNA; 21 BP.  
XX  
AC AAQ73754;  
XX  
DT 10-JUL-1995 (first entry)  
XX  
DE Rice starch branching enzyme promoter 3'-primer.  
XX  
KM Starch branching enzyme promoter; rice; starch content; PCR primer; ss.  
XX  
OS Synthetic.

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XX JP06261767-A.
XX
XX PD 20-SEP-1994.
XX
XX PF 22-OCT-1993; 93JP-00265171.
XX
XX PR 29-OCT-1992; 92JP-00291719.
XX
XX PA (MITS-) MITSUI GYOSAI SHOKUBUTSU BIO KENKYUSHO.
XX
XX DR WPI; 1994-337418/42.
XX
XX PT New gene of branching enzyme of rice starch - useful for increasing
XX starch yield of grain.
XX
XX PS Example 2; Page 13; 13pp; Japanese.
XX
XX CC The rice starch branching enzyme gene promoter was amplified using a 5'-
CC primer (AA073753) and a 3'-primer (AA073754) corresponding to nucleotides
CC 4-23 and 995-1115, respectively, of the promoter sequence. The promoter
CC can be operatively linked to the branching enzyme gene or to heterologous
CC genes for expression in plant seeds
XX
XX SQ Sequence 21 BP; 0 A; 3 C; 12 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 546 GTGGGTGCGTGTGCGTGGCT 565
DB |||||
2 GTGTGTGCGTGTGCGCGCT 21

RESULT 283
AA075630/C
ID AA075630 standard; DNA; 21 BP.
XX
XX AC AA075630;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KM Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENBSEQ files AA075547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1517 ATTAAAAAAAAAAGTAAA 1536
DB |||||
20 ATGAAAAAAAAAAAAAAAAA 1

RESULT 285
AA075676/C
ID AA075676 standard; DNA; 21 BP.
XX
XX AC AA075676;
XX
XX DT 04-AUG-1995 (first entry)

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```

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1518 TTAAAAAAAAAAGTAAA 1537
DB |||||
20 TTCAAAAAAAAAAAAAAAAA 1

RESULT 284
AA075762/C
ID AA075762 standard; DNA; 21 BP.
XX
XX AC AA075762;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KM Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX DT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENBSEQ files AA075547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1517 ATTAAAAAAAAAAGTAAA 1536
DB |||||
20 ATGAAAAAAAAAAAAAAAAA 1

RESULT 285
AA075676/C
ID AA075676 standard; DNA; 21 BP.
XX
XX AC AA075676;
XX
XX DT 04-AUG-1995 (first entry)

```

```
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1518 TTAAAAAAAAGTAAA 1537
DB 21 TTATTAATAAAAAAAAAA 2
RESULT 286
AAQ75627/C
ID AAQ75627 standard; DNA; 21 BP.
XX
XX AAQ75627;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1518 TTAAAAAAAAGTAAA 1537
DB 21 TTATTAATAAAAAAAAAA 2
```

```
PT by digestion with restriction enzymes.
XX
XX
XX Disclosure; Page 6; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1518 TTAAAAAAAAGTAAA 1537
DB 20 TTCAAAAAAAAAAAAAAAA 1
RESULT 287
AAQ75631/C
ID AAQ75631 standard; DNA; 21 BP.
XX
XX AAQ75631;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1517 ATTTAAAAAAAAGTAAA 1536
DB 11 ATTTAAAAAAAAGTAAA 11
```



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DB      20 ATCAAAAAAAAAAAAAA 1
RESULT 288
AAQ75693/C
ID      AAQ75693 standard; DNA; 21 BP.
XX
XX      AAQ75693;
AC
XX      04-AUG-1995 (first entry)
DT
XX      Reverse transcription primer used in cDNA analysis technique.
DE
XX      Analysis; gene expression; reverse transcription; primer; cDNA;
KM      aggregate; restriction enzyme; ss.
XX      Synthetic.
OS      JP06303997-A.
PN
XX      01-NOV-1994.
PD
XX      16-APR-1993; 93JP-00112515.
PF
XX      16-APR-1993; 93JP-00112515.
PR      16-APR-1993; 93JP-00112515.
XX      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX      WPI; 1995-018287/03.
DR
XX      Analysis of cDNA and gene expression - by amplification of mRNA followed
PT      by digestion with restriction enzymes.
XX
XX      Disclosure; Page 7; 11pp; Japanese.
PS
XX      A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC      labelled reverse transcription primers (GENESQ files AAQ75547-075798)
CC      and using the aggregate of mRNAs as the template for each reverse
CC      transcription primer; (b) digesting each of the prepared aggregates of
CC      the double-stranded cDNAs with restriction enzyme and; (c)
CC      electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC      method can be used to analyse gene expression rapidly and easily
XX
XX      Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY      1512 TGTTAATTAAAAA 1531
DB      20 TGTAAAAA 1
RESULT 289
AAQ75634/C
ID      AAQ75634 standard; DNA; 21 BP.
XX
XX      AAQ75634;
AC
XX      04-AUG-1995 (first entry)
DT
XX      Reverse transcription primer used in cDNA analysis technique.
DE
XX      Analysis; gene expression; reverse transcription; primer; cDNA;
KM      aggregate; restriction enzyme; ss.
XX      Synthetic.
OS      JP06303997-A.
PN
XX      01-NOV-1994.
PD

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XX      16-APR-1993; 93JP-00112515.
PF
XX      16-APR-1993; 93JP-00112515.
PR      16-APR-1993; 93JP-00112515.
XX      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX      WPI; 1995-018287/03.
DR
XX      Analysis of cDNA and gene expression - by amplification of mRNA followed
PT      by digestion with restriction enzymes.
XX
XX      Disclosure; Page 6; 11pp; Japanese.
PS
XX      A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC      labelled reverse transcription primers (GENESQ files AAQ75547-075798)
CC      and using the aggregate of mRNAs as the template for each reverse
CC      transcription primer; (b) digesting each of the prepared aggregates of
CC      the double-stranded cDNAs with restriction enzyme and; (c)
CC      electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC      method can be used to analyse gene expression rapidly and easily
XX
XX      Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY      1517 ATTAATAAAGTAA 1536
DB      20 ATCAAAAAAAAAAAAAA 1
RESULT 290
AAQ75684
ID      AAQ75684 standard; DNA; 21 BP.
XX
XX      AAQ75684;
AC
XX      04-AUG-1995 (first entry)
DT
XX      Reverse transcription primer used in cDNA analysis technique.
DE
XX      Analysis; gene expression; reverse transcription; primer; cDNA;
KM      aggregate; restriction enzyme; ss.
XX      Synthetic.
OS      JP06303997-A.
PN
XX      01-NOV-1994.
PD
XX      16-APR-1993; 93JP-00112515.
PF
XX      16-APR-1993; 93JP-00112515.
PR      16-APR-1993; 93JP-00112515.
XX      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX      WPI; 1995-018287/03.
DR
XX      Analysis of cDNA and gene expression - by amplification of mRNA followed
PT      by digestion with restriction enzymes.
XX
XX      Disclosure; Page 7; 11pp; Japanese.
PS
XX      A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC      labelled reverse transcription primers (GENESQ files AAQ75547-075798)
CC      and using the aggregate of mRNAs as the template for each reverse
CC      transcription primer; (b) digesting each of the prepared aggregates of
CC      the double-stranded cDNAs with restriction enzyme and; (c)
CC      electrophoresing the digested aggregate of cDNAs in separate lanes. The

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CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match      1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No.3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1248 TTTGTTTGGTTTTCATCA 1267
      ||| ||| ||| ||| ||| |||
Db      2 TTTTTCATCA 21

RESULT 291
AAQ75684/C
ID AAQ75684 standard; DNA; 21 BP.
XX
AC AAQ75684;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KM Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESBQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match      1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No.3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1512 TGTATATTAATAAAAAAAAA 1531
      ||| ||| ||| ||| ||| |||
Db      21 TGATTAATAAAAAAAAAAAAAA 2

RESULT 292
AAQ75695/C
ID AAQ75695 standard; DNA; 21 BP.
XX
AC AAQ75695;
XX
DT 04-AUG-1995 (first entry)
XX
```

```
DE Reverse transcription primer used in cDNA analysis technique.
XX
KM Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESBQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match      1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No.3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1517 ATTAATAAAAAAAAAAGTAA 1536
      ||| ||| ||| ||| ||| |||
Db      20 AGTAAAAAAAAAAAAAAAAA 1

RESULT 293
AAQ75682/C
ID AAQ75682 standard; DNA; 21 BP.
XX
AC AAQ75682;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KM Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
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XX  Disclosure; Page 7; 11pp; Japanese.
XX
PS  A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC  double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC  labelled reverse transcription primers (GENSEQ files AA075547-075798)
CC  and using the aggregate of mRNAs as the template for each reverse
CC  transcription primer; (b) digesting each of the prepared aggregates of
CC  the double-stranded cDNAs with restriction enzyme and; (c)
CC  electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC  method can be used to analyse gene expression rapidly and easily
XX
SQ  Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match      1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY      1516 AATTAAAAAAGCTAA 1535
Db      20 AATAAAAA 1

RESULT 294
AA075753
ID      AA075753 standard; DNA; 21 BP.
XX
XX      AA075753;
XX
DT      04-AUG-1995 (first entry)
DE
DE      Reverse transcription primer used in cDNA analysis technique.
XX
XX      Analysis; gene expression; reverse transcription; primer; cDNA;
XX      aggregate; restriction enzyme; ss.
XX
XX      Synthetic.
OS
XX      JP06303997-A.
XX
XX      01-NOV-1994.
PD
XX      16-APR-1993; 93JP-00112515.
PF
XX      16-APR-1993; 93JP-00112515.
PR
XX      16-APR-1993; 93JP-00112515.
XX
XX      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX      WPI; 1995-018287/03.
DR
XX
XX      Analysis of cDNA and gene expression - by amplification of mRNA followed
PT      by digestion with restriction enzymes.
PT
PS  Disclosure; Page 8; 11pp; Japanese.
XX
XX      A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC  double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC  labelled reverse transcription primers (GENSEQ files AA075547-075798)
CC  and using the aggregate of mRNAs as the template for each reverse
CC  transcription primer; (b) digesting each of the prepared aggregates of
CC  the double-stranded cDNAs with restriction enzyme and; (c)
CC  electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC  method can be used to analyse gene expression rapidly and easily
XX
SQ  Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match      1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY      1302 TCATTTTATTTTCAG 1321
Db      1 TTTTATTTTTCAG 20

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RESULT 295
AAQ75694/C
ID AAQ75694 standard; DNA; 21 BP.
XX
XX
AC AAQ75694;
XX
XX
DT 04-AUG-1995 (first entry)
XX
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX
OS Synthetic.
XX
XX
PN JP06303997-A.
XX
XX
PD 01-NOV-1994.
XX
XX
PF 16-APR-1993; 93JP-00112515.
XX
XX
PR 16-APR-1993; 93JP-00112515.
XX
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX
DR WPI; 1995-018287/03.
XX
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENBSEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
SQ Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred.No. 3,4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
CY 1512 TGTAAATTAAAAAAA 1511
DB 20 TGTAAAAAAA 1
XX
XX
RESULT 296
AAQ75700/C
ID AAQ75700 standard; DNA; 21 BP.
XX
XX
AC AAQ75700;
XX
XX
DT 04-AUG-1995 (first entry)
XX
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX
OS Synthetic.
XX
XX
PN JP06303997-A.
XX
XX
PD 01-NOV-1994.
XX

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PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WP1; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily.
XX
SQ Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

CY 1512 TGTTAATTAAAAA 1531
DB 21 TGTAAAAA 2

RESULT 297
AAQ75758/C
ID AAQ75758 standard; DNA; 21 BP.
XX
AC AAQ75758;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
FN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WP1; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily.
XX
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XX
SQ Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

CY 1518 TTAATAAAGTAAAA 1537
DB 20 TTGAAAAA 1

RESULT 298
AAQ75716/C
ID AAQ75716 standard; DNA; 21 BP.
XX
AC AAQ75716;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
FN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WP1; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily.
XX
SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

CY 1512 TGTTAATTAAAAA 1531
DB 21 TGTAAAAA 2

RESULT 299
AAQ75764/C
ID AAQ75764 standard; DNA; 21 BP.
XX
AC AAQ75764;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
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XX XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP0630397-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WP; 1995-018287/03.
XX XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESD files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
OY Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
DB 1512 TGTAAATTAAAAA 1531
21 TGTCAAAAAAAAAA 2
OY RESULT 300
AAQ75628/C
ID AAQ75628 standard; DNA; 21 BP.
XX AAQ75628;
XX AC
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP0630397-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WP; 1995-018287/03.
XX XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 11pp; Japanese.
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PS Disclosure; Page 6; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESD files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 3 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
OY Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
DB 1518 TTAATAAATAAGTAAA 1537
20 TTCAAAAAAAAAA 1
OY RESULT 301
AAQ75636/C
ID AAQ75636 standard; DNA; 21 BP.
XX AAQ75636;
XX AC
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP0630397-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WP; 1995-018287/03.
XX XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESD files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
OY Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
DB 1512 TGTAAATTAAAAA 1531
21 TGTCAAAAAAAAAA 2
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RESULT 302
AAQ75714/C
ID AAQ75714 standard; DNA; 21 BP.
XX
AC AAQ75714;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
KM Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JF06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI, 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENBSEQ files AAQ7547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1517 ATTAAAAAAAAAAAAAGTAAA 1536
DB 1 ||||| ||||| |||
20 ACTAAAAAAAAAAAAAAAAAAAA 1
RESULT 303
AAQ75760/C
ID AAQ75760 standard; DNA; 21 BP.
XX
AC AAQ75760;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
KM Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JF06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI, 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENBSEQ files AAQ7547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1517 ATTAAAAAAAAAAAAAGTAAA 1536
DB 1 ||||| ||||| |||
20 ACTAAAAAAAAAAAAAAAAAAAA 1

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XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENBSEQ files AAQ75547-075798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 3,4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0
XX
XX 1517 ATTTAAAAAAGCTGAA 1536
XX |||||
XX 20 ATGAAAAAAAAAAAAA 1
XX
XX RESULT 304
XX AAQ75632/C
XX ID AAQ75632 standard; DNA; 21 BP.
XX
XX AAQ75632;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS
XX Synthetic.
XX
XX JF06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX PF
XX 16-APR-1993; 93JP-00112515.
XX PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX PA
XX WPI; 1995-018287/03.
XX DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENBSEQ files AAQ75547-075798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX

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SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1517 ATTAAAAAAAAAGTAAA 1536  
 |||||  
 DB 20 ATCAAAAAAAAAAAAAAAA 1  
 |||||  
 RESULT 305  
 AAQ75692/C  
 ID AAQ75692 standard; DNA; 21 BP.  
 XX  
 AC AAQ75692;  
 XX  
 DT 04-AUG-1995 (first entry)  
 XX  
 DE Reverse transcription primer used in cDNA analysis technique.  
 XX  
 KM Analysis; gene expression; reverse transcription; primer; cDNA;  
 KM aggregate; restriction enzyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN JP06303997-A.  
 XX  
 PD 01-NOV-1994.  
 XX  
 PF 16-APR-1993; 93JP-00112515.  
 XX  
 PR 16-APR-1993; 93JP-00112515.  
 XX  
 PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
 PA  
 DR WPI; 1995-018287/03.  
 XX  
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
 PT by digestion with restriction enzymes.  
 XX  
 PS Disclosure; Page 7; 11pp; Japanese.  
 XX  
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
 CC labelled reverse transcription primers (GENESBQ files AAQ75547-Q75798)  
 CC and using the aggregate of mRNAs as the template for each reverse  
 CC transcription primer; (b) digesting each of the prepared aggregates of  
 CC the double-stranded cDNAs with restriction enzyme and; (c)  
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
 CC method can be used to analyse gene expression rapidly and easily  
 XX  
 SQ Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1512 TGTATATTAATAAAAAAAAA 1531  
 |||||  
 DB 20 TGTAAAAAAAAAAAAAAAA 1  
 |||||  
 RESULT 306  
 AAQ75712/C  
 ID AAQ75712 standard; DNA; 21 BP.  
 XX  
 AC AAQ75712;  
 XX  
 DT 04-AUG-1995 (first entry)  
 XX  
 DE Reverse transcription primer used in cDNA analysis technique.  
 XX

KM Analysis; gene expression; reverse transcription; primer; cDNA;  
 KM aggregate; restriction enzyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN JP06303997-A.  
 XX  
 PD 01-NOV-1994.  
 XX  
 PF 16-APR-1993; 93JP-00112515.  
 XX  
 PR 16-APR-1993; 93JP-00112515.  
 XX  
 PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
 PA  
 DR WPI; 1995-018287/03.  
 XX  
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
 PT by digestion with restriction enzymes.  
 XX  
 PS Disclosure; Page 7; 11pp; Japanese.  
 XX  
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of  
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
 CC labelled reverse transcription primers (GENESBQ files AAQ75547-Q75798)  
 CC and using the aggregate of mRNAs as the template for each reverse  
 CC transcription primer; (b) digesting each of the prepared aggregates of  
 CC the double-stranded cDNAs with restriction enzyme and; (c)  
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
 CC method can be used to analyse gene expression rapidly and easily  
 XX  
 SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1517 ATTAAAAAAAAAGTAAA 1536  
 |||||  
 DB 20 ACTAAAAAAAAAAAAAAAA 1  
 |||||  
 RESULT 307  
 AAQ75756/C  
 ID AAQ75756 standard; DNA; 21 BP.  
 XX  
 AC AAQ75756;  
 XX  
 DT 04-AUG-1995 (first entry)  
 XX  
 DE Reverse transcription primer used in cDNA analysis technique.  
 XX  
 KM Analysis; gene expression; reverse transcription; primer; cDNA;  
 KM aggregate; restriction enzyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN JP06303997-A.  
 XX  
 PD 01-NOV-1994.  
 XX  
 PF 16-APR-1993; 93JP-00112515.  
 XX  
 PR 16-APR-1993; 93JP-00112515.  
 XX  
 PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
 PA  
 DR WPI; 1995-018287/03.  
 XX  
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed  
 PT by digestion with restriction enzymes.  
 XX  
 PS Disclosure; Page 8; 11pp; Japanese.  
 XX

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
XX method can be used to analyse gene expression rapidly and easily

SO Sequence 21 BP; 1 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1518 TTTAAAAAAGTAAA 1537  
Db 20 TTTAAAAAAGTAAA 1

RESULT 308  
AAQ75698/c  
ID AAQ75698 standard; DNA; 21 BP.

AC AAQ75698;  
DT 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

KM Analysis; gene expression; reverse transcription; primer; cDNA;  
XX aggregate; restriction enzyme; ss.

OS Synthetic.

PN JP06303997-A.

PD 01-NOV-1994.

PF 16-APR-1993; 93JP-00112515.

PR 16-APR-1993; 93JP-00112515.

PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.

DR WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.

PS Disclosure; Page 7; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
XX method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1517 ATTAAAAAAGTAAA 1536  
Db 20 AGTAAAAAAGTAAA 1

RESULT 309  
AAQ75751  
ID AAQ75751 standard; DNA; 21 BP.

AC AAQ75751;

DT 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

KM Analysis; gene expression; reverse transcription; primer; cDNA;  
XX aggregate; restriction enzyme; ss.

OS Synthetic.

PN JP06303997-A.

PD 01-NOV-1994.

PF 16-APR-1993; 93JP-00112515.

PR 16-APR-1993; 93JP-00112515.

PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.

DR WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed  
PT by digestion with restriction enzymes.

PS Disclosure; Page 8; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of  
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)  
CC and using the aggregate of mRNAs as the template for each reverse  
CC transcription primer; (b) digesting each of the prepared aggregates of  
CC the double-stranded cDNAs with restriction enzyme and; (c)  
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The  
XX method can be used to analyse gene expression rapidly and easily

SO Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1302 TCTATTTTATTTCAG 1321  
Db 1 TTTTTCAG 20

RESULT 310

AAQ75754  
ID AAQ75754 standard; DNA; 21 BP.

AC AAQ75754;

DT 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

KM Analysis; gene expression; reverse transcription; primer; cDNA;  
XX aggregate; restriction enzyme; ss.

OS Synthetic.

PN JP06303997-A.

PD 01-NOV-1994.

PF 16-APR-1993; 93JP-00112515.



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PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1302 TCTATTTTATTTTTCAG 1321
DB 1 TTTTTCAG 20
RESULT 311
AAQ75758/C
ID AAQ75759 standard; DNA; 21 BP.
XX
XX AAQ75759;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP0630397-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
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Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1517 ATTAAGTAAAGTAA 1536
DB 20 ATGAAGTAAAGTAA 1
RESULT 312
AAQ75644/C
ID AAQ75644 standard; DNA; 21 BP.
XX
XX AAQ75644;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP0630397-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1518 TTAAGTAAAGTAA 1537
DB 21 TTAAGTAAAGTAA 2
RESULT 313
AAQ75679/C
ID AAQ75679 standard; DNA; 21 BP.
XX
XX AAQ75679;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
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KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
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XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESBQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily.
XX
XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1516 AATTAAAAAAAGTAA 1535
XX ||| ||||| |||
XX 20 AATAAAAAAAGTAA 1
XX
XX RESULT 314
XX AAQ75707 standard; DNA; 21 BP.
XX
XX AAQ75707;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
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CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESBQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily.
XX
XX Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1304 TATTTTTTTTATTTTCAGAG 1323
XX ||| ||||| ||| |||
XX 2 TTTTTTTTTTTTATTTAGAG 21
XX
XX RESULT 315
XX AAQ75755/c
XX ID AAQ75755 standard; DNA; 21 BP.
XX
XX AAQ75755;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESBQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily.
XX
XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1518 TTAAAAAAAGTAA 1537
XX ||| ||||| |||
XX 20 TTGAAAAAAAGTAA 1
XX
XX RESULT 316
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AAQ75696/c
ID AAQ75696 standard; DNA; 21 BP.
XX
XX
AC AAQ75696;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PE 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESSEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1517 ATTAAGTAAAGTAA 1536
DB 20 AGTAAAAAGTAAAGTAA 1
XX
RESULT 317
AAQ75772/c
ID AAQ75772 standard; DNA; 21 BP.
XX
XX
AC AAQ75772;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PE 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX

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XX
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX
DR WPI; 1995-018287/03.
XX
DT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESSEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1518 TTAAGTAAAGTAA 1537
DB 21 TTAGTAAAGTAAAGTAA 2
XX
RESULT 318
AAQ75711/c
ID AAQ75711 standard; DNA; 21 BP.
XX
XX
AC AAQ75711;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PE 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESSEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
XX

```

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1517 ATTAATAAAAAAAAAAGTAA 1536  
 |||  
 Db 20 ACTAATAAAAAAAAAAAAAA 1

RESULT 319  
 AAT97067  
 ID AAT97067 standard; DNA; 21 BP.  
 XX  
 AC AAT97067;  
 DT 20-MAR-1998 (first entry)  
 XX  
 DE T84 target specific primer TML1.  
 XX  
 KM PCR primer; amplify; Venezuelan equine encephalitis virus; VEE;  
 KM nucleic acid detection; replication reaction; clinical sample analysis;  
 KM food analysis; crop analysis; homogeneous detection probe system; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO9732044-A1.  
 PD 04-SEP-1997.  
 XX  
 PF 27-FEB-1997; 97WO-US002892.  
 XX  
 PR 01-MAR-1996; 96US-0012636P.  
 XX  
 PA (DUPO) DU PONT DE NEMOURS & CO E. I.  
 XX  
 PI Ebercole RC, Hendrickson ER, Fitzpatrick-Mcelligott S, Perry MP;  
 XX  
 DR WPI; 1997-448704/41.  
 XX  
 PT Detecting replicated target nucleic acid - by incorporating a label in  
 PT presence of a unreplicable, labelled detection probe, used for analysis  
 PT of clinical samples, food, etc.  
 XX  
 PS Example 7; Page 30; 69pp; English.  
 XX  
 CC This sequence represents a primer for T84, a reporter oligonucleotide for  
 CC human chorionic gonadotropin and can be used in the method of the  
 CC invention. The method of the invention is for detecting a target nucleic  
 CC acid sequence (1) in a replication reaction. The method comprises: (1)  
 CC replicating at least one (1) with a composition containing first label  
 CC (11) that can be incorporated into replicated nucleic acid and a  
 CC detection probe (DP) consisting of a second label (12), target domain and  
 CC replication inhibiting domain that prevents the DP from participating in  
 CC the replication reaction, to produce a hybrid of DP and at least one  
 CC replicated (1); (11) immobilising the hybrid through L1 or L2; and (111)  
 CC detecting presence of immobilised hybrid. The method is used with any  
 CC replication process, including PCR in cells, e.g. for analysis of  
 CC clinical samples, foods, crops, soil, water etc. The method using a  
 CC homogeneous detection probe system allows real-time monitoring of product  
 CC formation and is not restricted by base composition of probes or primers,  
 CC melting or annealing temperatures or PCR cycling conditions. The presence  
 CC of probes throughout the reaction does not inhibit replication or  
 CC decrease yield, and eliminates the need for an additional hybridisation  
 CC stage, resulting in faster and more efficient assay. Also detection of  
 CC unwanted sequences is reduced, electrophoresis is not required and  
 CC products can be detected in several different formats  
 XX  
 SQ Sequence 21 BP; 3 A; 5 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1011 CGGCTGACCTGGAGATTGA 1030  
 |||  
 Db 2 CGGCTTGCCTCGAGATTGA 21

RESULT 320  
 AAV30293  
 ID AAV30293 standard; DNA; 21 BP.  
 XX  
 AC AAV30293;  
 DT 28-SEP-1998 (first entry)  
 XX  
 DE SUP-1 family toxin gene 49C primer A.  
 XX  
 KM Insecticide; pesticide; toxin; SUP-1; biological control; lepidopteran;  
 KM PCR; primer; ss.  
 XX  
 OS Synthetic.  
 OS Bacillus thuringiensis.  
 XX  
 PN WO9818932-A2.  
 PD 07-MAY-1998.  
 XX  
 PF 30-OCT-1997; 97WO-US019804.  
 XX  
 PR 30-OCT-1996; 96US-0029848P.  
 XX  
 PA (MYCO) MYCOGEN CORP.  
 XX  
 PI Feltelson JS, Schnepf HE, Narva KE, Stockhoff BA, Schweits JL;  
 PI Lower D, Schwab G, Dullum CJ, Muller-Cohn J, Stamp L;  
 XX  
 DR WPI; 1998-272226/24.  
 XX  
 PT Bacillus thuringiensis isolates - used for producing pesticidal toxins  
 PT and nucleotide sequences for control of lepidopterans and coleopterans.  
 XX  
 PS Example 5; Page 29; 139pp; English.  
 XX  
 CC 49C primer A was used with primer 339 reverse (see AAV30287) to amplify  
 CC DNA (see AAV30294) coding for a portion of a novel toxin of Bacillus  
 CC thuringiensis (B.t.) strain PS49C (NRRL B-21532). This novel toxin  
 CC belongs to the novel SUP-1 family of B.t. soluble toxins that are active  
 CC against lepidopteran pests. The PCR product is claimed for use as a PCR  
 CC primer or hybridisation probe, and can be used to identify toxins and  
 CC genes of the SUP-1 family. Disclosed and claimed are novel B.t. isolates,  
 CC pesticidal toxins (see AAV60215-32), genes, nucleotide probes and primers  
 CC (see AAV30288-321 and AAT9734-87), and transformed host cells that  
 CC express these toxins. The invention provides 8 entirely new families of  
 CC toxins, including SUP-1, from B.t. isolates  
 XX  
 SQ Sequence 21 BP; 5 A; 9 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1630 ATCCTCCCTACCTTTGAA 1649  
 |||  
 Db 2 ATCCTCCCTACCTTTCTAA 21

RESULT 321  
 AAV32912  
 ID AAV32912 standard; DNA; 21 BP.  
 XX  
 AC AAV32912;  
 DT 26-OCT-1998 (first entry)  
 XX

```

DE Bovine lactoferrin cDNA primer 1.
XX
XX PCR; primer; amplification; pepsin; gastrointestinal tract; milk;
KW Aspergillus niger beta-galactosidase gene; lactase intolerance;
XX Cheese making; chymosin; Bovine lactoferrin cDNA; ss.
OS Synthetic.
OS Bos sp.
XX
XX MO9829536-A2.
XX
XX 09-JUL-1998.
XX
XX 29-DEC-1997; 97WO-IB001658.
XX
XX 31-DEC-1996; 96US-00775842.
XX
XX (NEXI-) NEXIA BIOTECHNOLOGIES INC.
XX
XX Karacas CN, Turner JD, Eino M, Kabel JV, Amantea GF;
XX
XX WPI; 1998-388116/33.
XX
XX Synthetic beta-galactosidase inactive in milk but active in vivo - can be
XX chemically activated and used to treat lactose intolerance, also useful
XX in cheese production.
XX
XX Example 1; Page 13; 38pp; English.
XX
XX Primers 1 and 2 (AAV32913) were used in a PCR reaction to amplify the
XX bovine lactoferrin cDNA. The PCR product was used as a tail which was
XX fused through a pepin recognition site to the 3' end of the Aspergillus
XX niger beta-galactosidase gene. The invention provides a synthetic beta-
XX galactosidase which differs from the natural occurring enzyme in being
XX inactive in milk but capable of being activated by a chemical or
XX condition naturally present in the gastrointestinal tract of humans. The
XX design of this synthetic enzyme comprises of a tail domain fused to the
XX beta-galactosidase through a cleavage site. The presence of the tail
XX domain renders the enzyme inactive and it can also be used as a
XX purification handle. The synthetic beta-galactosidase is claimed to be
XX able to hydrolyse lactose in vivo to overcome lactase intolerance and
XX thereby reduce associated gastrointestinal disorders. The synthetic beta-
XX galactosidase is also claimed to be useful in cheese making whereby it is
XX activated by chymosin when added to milk
XX
XX
XX Sequence 21 BP; 4 A; 5 C; 9 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1605 GGTCTCCGAGAACTGGATG 1624
XX |||||
XX 1 GGTCAACGACGACTGATG 20
XX
XX
XX RESULT 322
XX AACT8935/c
XX ID AACT8935 standard; DNA; 21 BP.
XX
XX AACT8935;
XX
XX 08-FEB-2001 (first entry)
XX
XX Human PRO362 hybridisation probe SEQ ID NO:564.
XX
XX Human; secreted protein; transmembrane protein; PRO; EST; cytosolic;
XX expressed sequence tag; detection; cancer; PCR primer; probe; ss.
XX
XX Homo sapiens.
XX
XX MO200053756-A2.
XX
XX

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PD 14-SEP-2000.
XX
XX
XX 18-FEB-2000; 2000WO-US004341.
XX
XX 08-MAR-1999; 99WO-US005028.
XX
XX 12-MAR-1999; 99US-0123957P.
XX
XX 29-MAR-1999; 99US-0126773P.
XX
XX 21-APR-1999; 99US-0130232P.
XX
XX 28-APR-1999; 99US-0131445P.
XX
XX 14-MAY-1999; 99US-0134287P.
XX
XX 23-JUN-1999; 99US-0141037P.
XX
XX 26-JUL-1999; 99US-0145698P.
XX
XX 29-OCT-1999; 99US-0162506P.
XX
XX 30-NOV-1999; 99WO-US028313.
XX
XX 02-DEC-1999; 99WO-US028551.
XX
XX 02-DEC-1999; 99WO-US028565.
XX
XX 16-DEC-1999; 99WO-US030095.
XX
XX 30-DEC-1999; 99WO-US031243.
XX
XX 30-DEC-1999; 99WO-US031274.
XX
XX 05-JAN-2000; 2000WO-US000219.
XX
XX 06-JAN-2000; 2000WO-US000277.
XX
XX 06-JAN-2000; 2000WO-US000376.
XX
XX
XX (GETH ) GENENTECH INC.
XX
XX Ashkenazi AJ, Baker KP, Borstein D, Desnoyers L, Eaton DL;
XX Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
XX Goddard A, Godowski P, Grimaldi C, Gurney AL, Hillan KJ,
XX K11avin IU, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL,
XX Stewart TA, Tumas D, Williams PM, Wood WI;
XX
XX WPI; 2000-611443/58.
XX
XX
XX Novel PRO polypeptides and polynucleotides used in detection methods, to
XX target bioactive molecules to specific cells, and to modulate cellular
XX activities.
XX
XX
XX Example 114; Page 341; 636pp; English.
XX
XX
XX AACT8458 to AACT8599 represent polynucleotide and EST (expressed sequence
XX tag) sequences which encode secreted or transmembrane PRO polypeptides.
XX The PRO polynucleotides and polypeptides have cytostatic activity. The
XX polynucleotides and polypeptides can be used for detecting the presence
XX of PRO polypeptides in samples, for linking bioactive molecules to cells
XX and for modulating biological activities of cells, using the polypeptides
XX for specific targeting. The polypeptide targeting can be used to kill the
XX target cells, e.g. for the treatment of cancers. The polypeptide pairs
XX provide specific targeting of bioactive molecules to cells. AACT8600 to
XX AACT8987 represent PCR primers and probes used in the isolation of the
XX PRO polynucleotide sequences
XX
XX
XX Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 395 GGCCGAGAGCCCGCAGGTC 414
XX |||||
XX 20 GGCCGAGAGCCCTTCAGGTC 1
XX
XX
XX RESULT 323
XX AAC58192/c
XX ID AAC58192 standard; DNA; 21 BP.
XX
XX AAC58192;
XX
XX 25-JAN-2001 (first entry)
XX
XX Human PRO362 hybridisation probe SEQ ID NO:103.
XX
XX Human; tumour; diagnosis; neoplastic disease; identification; cancer;
XX
XX

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```
KW tumorigenesis; detection; neoplastic cell growth; proliferation;
KM cytosolic; antiinflammatory; immunomodulatory; inflammatory disorder;
KW immunological disorder; hybridisation; probe; PCR primer; ss.
OS Homo sapiens.
XX
PN WO200053754-A1.
XX
PD 14-SEP-2000.
XX
PF 06-JAN-2000; 2000WO-US000277.
XX
PR 08-MAR-1999; 99WO-US005028.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 21-APR-1999; 99US-0130232P.
PR 28-APR-1999; 99US-0131445P.
PR 05-OCT-1999; 99WO-US023089.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
XX
PA (GETH ) GENENTECH INC.
XX
PI Baker KP, Desauvage FJ, Goddard A, Gurney AL, Klein RD, Roy MA;
PI Wood WI;
XX
PI WPI; 2000-572269/53.
XX
PT New isolated antibody for use in compositions and methods for the
PT diagnosis and treatment of neoplastic cell growth and proliferation in
PT mammals, including humans, and in monitoring tumor treatment.
XX
PS Example 14; Page 116; 195pp; English.
XX
XX The present invention describes an isolated antibody (Ab) that binds to
CC one of the human proteins (P) designated PRO213, PRO1330, PRO149,
CC PRO231, PRO324, PRO351, PRO615, PRO615, PRO531, PRO538, PRO3664, PRO618,
CC PRO772, PRO703, PRO792 or PRO474. The Ab can be used in compositions and
CC methods for the diagnosis and treatment of neoplastic cell growth and
CC proliferation in mammals, including humans. Genes and polypeptides
CC encoded by them, that are amplified in the genome of a tumour cell, can
CC be identified and are useful targets for the treatment and prevention of
CC certain cancers and may be used to monitor tumour treatment. Compounds
CC that inhibit the expression or activity of the identified polypeptides
CC can be identified and used as antagonists. Benign or malignant tumours,
CC inflammatory disorders and immunological disorders can be treated.
CC AAC58123 to AAC58224 represent hybridisation probes and PCR primers used
CC in the isolation of the human PRO sequences. AAC58225 to AAC58241 and
CC AAB24041 to AAB24056 represent human PRO polynucleotide and protein
CC sequences given in the exemplification of the present invention
XX
SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;
XX
OY 395 GGGCGAAGCCCGAGGGTC 414
DB 20 GGCCGAGAGCCCTTCAGGGTC 1
XX
RESULT 324
ID AAH91826 standard; DNA; 21 BP.
XX
AC AAH91826;
XX
DT 09-OCT-2001 (first entry)
```

```
DE Human inflammatory bowel disease associated polymorphic site #901.
XX
XX Human; inflammatory bowel disease; Crohn's disease; ulcerative colitis;
KW single nucleotide polymorphism; SNP; chromosome 19p13; paternity test;
KW chromosome 5q31-33; forensic test; gene therapy; ds.
XX
OS Homo sapiens.
XX
XX
FH Key Location/Qualifiers
FT misc_feature 9
FT /tag= "a"
FT /note= "SNP, optionally T or A at this position"
XX
XX WO200142511-A2.
XX
PD 14-JUN-2001.
XX
PF 11-DEC-2000; 2000WO-US033632.
XX
PR 10-DEC-1999; 99US-0170257P.
PR 10-APR-2000; 2000US-0196046P.
XX
XX (WHEED ) WHITEHEAD INST BIOMEDICAL RES.
PA (ELLI-) ELLIPSE BIOTHERAPEUTICS CORP.
XX
PI Daly M, Hudson TJ, Lander ES, Rioux J, Siminovitch K;
XX
XX WPI; 2001-367874/38.
XX
XX
PT Testing for the presence of polymorphisms associated with inflammatory
PT bowel disease, using a hybridization assay.
XX
PS Claim 1; Page 76; 463pp; English.
XX
XX The present invention describes a method for detecting the presence of
CC polymorphisms associated with inflammatory bowel diseases such as
CC ulcerative colitis and Crohn's disease. The methods can be used to detect
CC the presence of genetic polymorphisms associated with inflammatory bowel
CC disease and correlating their occurrence with disease states. They may be
CC used in this way for phenotypic correlations, forensics, paternity
CC testing, medicine and genetic analysis. The present sequence is a
CC polymorphic site described in the exemplification of the invention
XX
SQ Sequence 21 BP; 1 A; 3 C; 0 G; 16 T; 0 U; 1 Other;
XX
OY 1298 TTAATCTATTTTATTTTATTTT 1318
DB 1 TTCAATCTCMTTTTATTTTATTTT 21
XX
RESULT 325
ID AAD23640/C
ID AAD23640 standard; DNA; 21 BP.
XX
AC AAD23640;
XX
XX
DT 07-MAR-2002 (first entry)
XX
XX Human CYP2D6 exon 3/4 genotyping upstream PCR primer #2.
XX
KW Human; pharmaceutical agent; mutation; genetic polymorphism; LQT;
KW long QT; cardiac repolarisation; Torsades de Pointe; Tdb; CYP2D6;
KW cytochrome P450; PCR primer; ss.
XX
OS Homo sapiens.
XX
XX WO200179554-A1.
XX
XX
XX 25-OCT-2001.
```



PR 02-JUN-2000; 2000WO-US015264.  
PR 28-JUL-2000; 2000WO-US020710.  
PR 24-AUG-2000; 2000WO-US023328.  
PR 01-DEC-2000; 2000WO-US032578.  
PR 20-DEC-2000; 2000WO-US034856.  
PR 28-FEB-2001; 2001WO-US006520.  
PR 22-MAR-2001; 2001WO-US009552.  
PR 25-MAY-2001; 2001WO-US017092.  
PR 01-JUN-2001; 2001WO-US017800.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUL-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
XX  
XX (GETH ) GENENTECH INC.  
XX  
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gertlisen ME;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,  
PI Kijavini TJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL,  
PI Stewart TA, Tumas D, Williams PM, Wood WI;  
XX  
DR WPI; 2003-328860/31.  
XX  
PT New secreted and transmembrane nucleic acids and polypeptides, designated  
PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,  
PT cardiac injury, infertility, birth defects, premature aging, AIDS, or  
PT cancer.  
XX  
PS Example 114; Page 186; 453pp; English.  
XX  
CC The invention describes an isolated nucleic acid (I) comprising, or which  
CC is at least 80 % sequence identity to, or the full-length coding sequence  
CC of, any of 118 300-2100 nucleotide sequences, which encodes its  
CC corresponding PRO polypeptide selected from 118 100-700 amino acid  
CC sequences, all given in the specification. The nucleic acid and  
CC polypeptides are useful for treating inflammatory diseases, organ  
CC failure, atherosclerosis, cardiac injury, infertility, birth defects,  
CC premature aging, AIDS, cancer, or diabetic complications. The nucleic  
CC acids are useful as hybridisation probes, in chromosome and gene mapping,  
CC and in generating antisense RNA or DNA. The polypeptides are useful as  
CC pharmaceuticals, diagnostics, biosensors or bioreactors. Both are useful  
CC in tissue typing. This sequence represents a novel human secreted and  
CC transmembrane PRO polypeptide associated probe  
XX  
SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred.No.3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 395 GGGCGAGCGCCGAGGATC 414  
Db 20 GGGCGAGCGCTTCAGGCTC 1  
ACAT72096/c  
ID ACA72096 standard; DNA; 21 BP.  
XX  
AC ACA72096;  
XX  
DT 11-AUG-2003 (first entry)  
XX  
DE Human PRO polypeptide associated oligonucleotide SEQ ID NO 564.  
XX  
KW Human; de; thrombolytic agent; interferon; interleukin; cytokine;  
KW erythropoietin; colony stimulating factor; cancer; colorectal carcinoma;  
KW apoptosis related condition; AIDS; amyotrophic lateral sclerosis;  
KW inflammatory disease; asthma; atherosclerosis; neurodegenerative disease;  
KW gastrointestinal disorder; Alzheimer's disease; Parkinson's disease;  
KW hypertension; myocardial ischemia; kidney disease; carcinogenesis;  
KW glomerulonephritis; lung disease; pulmonary hypertension; preeclampsia;  
KW bronchial asthma; gastric ulcer; renal failure; cardiovascular disease;

KW inflammatory bowel disease; reproductive disorder; premature labour.  
XX  
OS Homo sapiens.  
XX  
PN US2002177553-A1.  
XX  
PD 28-NOV-2002.  
XX  
PF 15-OCT-2001; 2001US-00978192.  
XX  
PR 17-OCT-1997; 97US-0062250P.  
PR 03-NOV-1997; 97US-0064349P.  
PR 13-NOV-1997; 97US-0065311P.  
PR 21-NOV-1997; 97US-0066364P.  
PR 10-MAR-1998; 98US-0077450P.  
PR 11-MAR-1998; 98US-0077632P.  
PR 11-MAR-1998; 98US-0077641P.  
PR 11-MAR-1998; 98US-0077649P.  
PR 12-MAR-1998; 98US-0077791P.  
PR 13-MAR-1998; 98US-0078004P.  
PR 17-MAR-1998; 98US-00840220.  
PR 20-MAR-1998; 98US-008886P.  
PR 20-MAR-1998; 98US-0078910P.  
PR 20-MAR-1998; 98US-0078936P.  
PR 20-MAR-1998; 98US-0078939P.  
PR 25-MAR-1998; 98US-0079294P.  
PR 26-MAR-1998; 98US-0079656P.  
PR 27-MAR-1998; 98US-0079663P.  
PR 27-MAR-1998; 98US-0079664P.  
PR 27-MAR-1998; 98US-0079689P.  
PR 27-MAR-1998; 98US-0079728P.  
PR 27-MAR-1998; 98US-0079786P.  
PR 30-MAR-1998; 98US-0079920P.  
PR 30-MAR-1998; 98US-0079923P.  
PR 26-JUN-1998; 98US-00105413.  
PR 07-OCT-1998; 98US-00168979.  
PR 07-OCT-1998; 98WO-US021141.  
PR 02-NOV-1998; 98US-00184216.  
PR 06-NOV-1998; 98US-00187368.  
PR 20-NOV-1998; 98WO-US024855.  
PR 07-DEC-1998; 98US-00202054.  
PR 22-DEC-1998; 98US-00218517.  
PR 05-JAN-1999; 99WO-US000106.  
PR 05-MAR-1999; 99US-00254465.  
PR 08-MAR-1999; 99WO-US005028.  
PR 10-MAR-1999; 99US-0026568P.  
PR 12-MAR-1999; 99WO-US005190.  
PR 12-MAR-1999; 99US-00267213.  
PR 12-APR-1999; 99US-00284291.  
PR 14-MAY-1999; 99US-00311832.  
PR 14-MAY-1999; 99WO-US010733.  
PR 02-JUN-1999; 99WO-US012252.  
PR 25-AUG-1999; 99US-00380137.  
PR 25-AUG-1999; 99US-00380138.  
PR 25-AUG-1999; 99US-00380142.  
PR 25-AUG-1999; 99WO-US028313.  
PR 30-NOV-1999; 99WO-US028551.  
PR 02-DEC-1999; 99WO-US028565.  
PR 02-DEC-1999; 99WO-US030095.  
PR 16-DEC-1999; 99WO-US031023.  
PR 30-DEC-1999; 99WO-US031243.  
PR 30-DEC-1999; 99WO-US031274.  
PR 05-JAN-2000; 2000WO-US000217.  
PR 05-JAN-2000; 2000WO-US000277.  
PR 06-JAN-2000; 2000WO-US000376.  
PR 11-FEB-2000; 2000WO-US003565.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 02-MAR-2000; 2000WO-US005841.  
PR 10-MAR-2000; 2000WO-US006319.  
PR 21-MAR-2000; 2000WO-US007532.  
PR 30-MAR-2000; 2000WO-US008439.  
PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.



PR 30-MAY-2000; 2000MO-US014941.  
PR 02-JUN-2000; 2000MO-US015264.  
PR 28-JUL-2000; 2000MO-US020710.  
PR 24-AUG-2000; 2000MO-US023328.  
PR 08-NOV-2000; 2000US-00709238.  
PR 27-NOV-2000; 2000US-00723749.  
PR 01-DEC-2000; 2000MO-US032678.  
PR 20-DEC-2000; 2000MO-US0747259.  
PR 20-DEC-2000; 2000MO-US034956.  
PR 28-FEB-2001; 2001MO-US006520.  
PR 22-MAR-2001; 2001US-00816744.  
PR 22-MAR-2001; 2001US-00816920.  
PR 22-MAR-2001; 2001MO-US009552.  
PR 10-MAY-2001; 2001US-00854280.  
PR 10-MAY-2001; 2001US-00854280.  
PR 25-MAY-2001; 2001MO-US017092.  
PR 01-JUN-2001; 2001US-00872035.  
PR 01-JUN-2001; 2001MO-US017800.  
PR 05-JUN-2001; 2001US-00874503.  
PR 14-JUN-2001; 2001US-00882636.  
PR 19-JUN-2001; 2001US-00886342.  
PR 20-JUN-2001; 2001MO-US019692.  
PR 20-JUN-2001; 2001MO-US021066.  
PR 09-JUL-2001; 2001MO-US021735.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
PA (GETH ) GENENTECH INC.  
PI Ashkenazi AJ, Baker KP, Botstein D, Desnovers L, Baton DL,  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME,  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,  
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL,  
PI Stewart TA, Tunas D, Williams PM, Wood WI;  
XX  
DR WPI; 2003-328499/31.  
XX  
PT New isolated PRO polypeptides e.g. PRO213, PRO274 and PRO300, for use as  
PT pharmaceuticals, diagnostics, biosensors and bioreactors, for identifying  
PT modulators of receptor-ligand interactions.  
XX  
PS Disclosure; SEQ ID NO 564; 55pp; English.  
XX  
XX The invention relates to an isolated secreted and transmembrane  
CC polypeptide, designated as PRO polypeptide. The PRO polypeptide is useful  
CC in PRO polypeptide detection methods. The PRO polypeptide is useful for  
CC linking a bioactive molecule to a cell. The PRO polypeptide or an  
CC antibody against it is useful for modulating a biological activity of a  
CC cell. The PRO polypeptide is useful in industrial applications including  
CC pharmaceuticals, diagnostics, biosensors and bioreactors. The PRO  
CC polypeptide is also useful as a thrombolytic agent, interferon,  
CC interleukin, erythropoietin, colony stimulating factor and other  
CC cytokines. The PRO polypeptide is useful for treating disease such as  
CC cancer e.g. colorectal carcinoma; apoptosis related conditions e.g. AIDS,  
CC amyotrophic lateral sclerosis; inflammatory disease e.g. asthma,  
CC atherosclerosis; neurodegenerative disease e.g. Alzheimer's disease,  
CC Parkinson's disease; cardiovascular disease e.g. hypertension and  
CC myocardial ischaemia; kidney disease e.g. renal failure and  
CC glomerulonephritis; lung disease e.g. pulmonary hypertension, bronchial  
CC asthma; gastrointestinal disorders e.g. gastric ulcer and inflammatory  
CC bowel disease; reproductive disorders e.g. premature labour and  
CC pre-eclampsia; carcinogenesis. The present sequence represents a PRO  
CC polypeptide associated oligonucleotide of the invention. Note: The  
CC sequence data for this patent did not form part of the printed  
CC specification but was obtained in electronic format directly from USPTO  
CC at [seqdata.uspto.gov/sequence.html?DocID=20020177553](http://seqdata.uspto.gov/sequence.html?DocID=20020177553)  
XX  
SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Gy 395 GGCCGAGAGCCGCGAGGTC 414

DB 20 GGCCGAGAGCCCTCAGGTC 1  
RESULT 328  
ABX92736/c  
ID ABX92736 standard; DNA; 21 BP.  
XX  
AC ABX92736;  
XX  
DT 08-MAY-2003 (first entry)  
XX  
DE Human PRO DNA probe SEQ ID No 564.  
XX  
KW Human; PRO polypeptide; secreted and transmembrane protein;  
KW immune disorder; diabetes; hyper-insulinaemia; hypo-insulinaemia;  
KW cardiac insufficiency; nervous system disorder; kidney disorder;  
KW bone disorder; cartilage disorder; arthritis; tumour; wound healing;  
KW genetic disorder; cytostatic; antidiabetic; anti-inflammatory;  
KW antihistatic; anti-tumour; vulnery; antianaemic; dermatological;  
KW cardiant; probe; ss.  
XX  
OS Homo sapiens.  
XX  
PN US2002169284-A1.  
XX  
PD 14-NOV-2002.  
XX  
PF 16-OCT-2001; 2001US-00978697.  
XX  
PP 26-MAY-1991; 81US-00267213.  
PR 17-OCT-1997; 97US-0062250P.  
PR 03-NOV-1997; 97US-0064249P.  
PR 13-NOV-1997; 97US-0065311P.  
PR 21-NOV-1997; 97US-0066364P.  
PR 10-MAR-1998; 98US-0077450P.  
PR 11-MAR-1998; 98US-0077632P.  
PR 11-MAR-1998; 98US-0077641P.  
PR 11-MAR-1998; 98US-0077649P.  
PR 12-MAR-1998; 98US-0077791P.  
PR 13-MAR-1998; 98US-0078004P.  
PR 17-MAR-1998; 98US-00040220.  
PR 20-MAR-1998; 98US-0078886P.  
PR 20-MAR-1998; 98US-0078910P.  
PR 20-MAR-1998; 98US-0078936P.  
PR 20-MAR-1998; 98US-0078939P.  
PR 25-MAR-1998; 98US-0079294P.  
PR 26-MAR-1998; 98US-0079656P.  
PR 27-MAR-1998; 98US-0079663P.  
PR 27-MAR-1998; 98US-0079664P.  
PR 27-MAR-1998; 98US-0079689P.  
PR 27-MAR-1998; 98US-0079728P.  
PR 27-MAR-1998; 98US-0079786P.  
PR 30-MAR-1998; 98US-0079920P.  
PR 30-MAR-1998; 98US-0079923P.  
PR 26-JUN-1998; 98US-00105413.  
PR 07-OCT-1998; 98US-00168978.  
PR 07-OCT-1998; 98MO-US021141.  
PR 02-NOV-1998; 98US-00184216.  
PR 06-NOV-1998; 98US-00187168.  
PR 20-NOV-1998; 98MO-US024855.  
PR 07-DEC-1998; 98US-00202054.  
PR 22-DEC-1998; 98US-00218517.  
PR 05-JAN-1999; 99MO-US000106.  
PR 05-MAR-1999; 99US-00254465.  
PR 08-MAR-1999; 99MO-US005028.  
PR 10-MAR-1999; 99US-00265686.  
PR 10-MAR-1999; 99MO-US005190.  
PR 12-APR-1999; 99US-00284291.  
PR 14-MAY-1999; 99US-00311832.  
PR 14-MAY-1999; 99MO-US010733.  
PR 02-JUN-1999; 99MO-US012252.  
PR 25-AUG-1999; 99US-00380137.

PR 25-AUG-1999; 99US-00380138.  
PR 25-AUG-1999; 99US-00380142.  
PR 30-NOV-1999; 99WO-US028313.  
PR 02-DEC-1999; 99WO-US028551.  
PR 02-DEC-1999; 99WO-US028555.  
PR 16-DEC-1999; 99WO-US030095.  
PR 30-DEC-1999; 99WO-US031243.  
PR 30-DEC-1999; 99WO-US031274.  
PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000277.  
PR 11-FEB-2000; 2000WO-US003565.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 02-MAR-2000; 2000WO-US005841.  
PR 10-MAR-2000; 2000WO-US006319.  
PR 21-MAR-2000; 2000WO-US007532.  
PR 30-MAR-2000; 2000WO-US008439.  
PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.  
PR 30-MAY-2000; 2000WO-US014941.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 28-JUN-2000; 2000WO-US020710.  
PR 24-AUG-2000; 2000WO-US023328.  
PR 08-NOV-2000; 2000US-00709238.  
PR 27-NOV-2000; 2000US-00723749.  
PR 01-DEC-2000; 2000WO-US032678.  
PR 20-DEC-2000; 2000US-00747259.  
PR 28-FEB-2001; 2000WO-US034956.  
PR 22-MAR-2001; 2001US-00816744.  
PR 22-MAR-2001; 2001US-00816920.  
PR 12-MAR-2001; 2001WO-US009552.  
PR 10-MAY-2001; 2001US-00854208.  
PR 10-MAY-2001; 2001US-00854280.  
PR 25-MAY-2001; 2001WO-US017092.  
PR 01-JUN-2001; 2001US-00872035.  
PR 05-JUN-2001; 2001WO-US017800.  
PR 01-JUN-2001; 2001US-00874503.  
PR 14-JUN-2001; 2001US-00882636.  
PR 19-JUN-2001; 2001US-00886342.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
XX (GETH ) GENENTECH INC.  
XX  
PI Ashkenazi A, Baker KP, Botstein D, Desnovers L, Eaton D;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gether H, Gerritsen ME,  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
PI Kijavini IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL,  
PI Stewart TA, Tamas D, Williams PM, Wood WI;  
XX  
XX WPI; 2003-288163/28.  
XX  
XX Novel secreted and transmembrane polypeptides and polynucleotides  
XX encoding them useful for treating cancer, kidney diseases, bone,  
XX cartilage disorders and immune deficiencies.  
XX  
XX Example 114, Page 191; 459pp; English.  
XX  
XX The present invention relates to the isolation of novel human PRO  
XX polypeptides, and the polynucleotide sequences encoding them. The PRO  
XX polypeptides are secreted and transmembrane proteins. The PRO  
XX polypeptides are useful for detecting other PRO polypeptides, for linking  
XX bioactive molecules to cells expressing PRO polypeptides, for modulating  
XX biological activities of cells expressing PRO polypeptides, and for  
XX identifying agonists or antagonists. The bioactive molecule maybe a  
XX toxin, radiolabel or antibody, and causes apoptosis or death of the cell.  
XX The PRO polypeptides are useful for treating immune disorders, diabetes  
XX or hyper- or hypo-insulinemia, cardiac insufficiency, nervous system  
XX disorders, kidney disorders, bone and cartilage disorders or arthritis,

CC tumours, and wound healing. The polynucleotide sequences encoding PRO  
CC polypeptides are useful as hybridisation probes, in chromosome and gene  
CC mapping, in the generation of antisense RNA and DNA, in the preparation  
CC of PRO polypeptides, for generating transgenic animals or knockout  
CC animals, for the genetic analysis of individuals with genetic disorders,  
CC and in gene therapy. The present sequence represents a probe used in the  
CC examples of the present invention. Note: The sequence data for this  
CC patent was obtained in electronic format directly from the USPTO web site  
CC at [seqdata.uspto.gov/psipds/Identify.html](http://seqdata.uspto.gov/psipds/Identify.html)  
XX  
SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
DY 395 GCGCGAAGCGCCGACGGTC 414  
DB 20 GCGCGAAGCGCTTCAGGGTC 1  
RESULT 329  
ACA66477/c  
ID ACA66477 standard; DNA; 21 BP.  
XX  
XX ACA66477;  
AC  
XX  
XX 24-JUN-2003 (first entry)  
DT  
XX  
DE Human secreted/transmembrane protein PRO362 TagManPCR probe.  
XX  
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; probe;  
XX melanigancy; cancer; ovarian cancer; colorectal cancer; sarcoma;  
XX leukemia; lymphoma; inflammatory disease; necrosis; atherosclerosis;  
XX infertility; premature aging; psoriasis; inflammatory disease;  
XX renal disease; arthritis; immune-mediated alopecia; stroke; encephalitis;  
XX hepatitis; multiple sclerosis; gene therapy.  
XX  
XX Homo sapiens.  
OS  
XX  
XX US2003004102-A1.  
PN  
XX  
XX 02-JAN-2003.  
PD  
XX  
XX 15-OCT-2001; 2001US-00978189.  
PF  
XX  
XX 17-OCT-1997; 97US-0062250P.  
PR 03-NOV-1997; 97US-0064249P.  
PR 13-NOV-1997; 97US-0065311P.  
PR 21-NOV-1997; 97US-0066364P.  
PR 10-MAR-1998; 98US-0077450P.  
PR 11-MAR-1998; 98US-0077632P.  
PR 11-MAR-1998; 98US-0077641P.  
PR 11-MAR-1998; 98US-0077649P.  
PR 12-MAR-1998; 98US-0077791P.  
PR 13-MAR-1998; 98US-0078004P.  
PR 17-MAR-1998; 98US-00040220.  
PR 20-MAR-1998; 98US-0078886P.  
PR 20-MAR-1998; 98US-0078910P.  
PR 20-MAR-1998; 98US-0078936P.  
PR 20-MAR-1998; 98US-0078939P.  
PR 25-MAR-1998; 98US-0079294P.  
PR 26-MAR-1998; 98US-0079656P.  
PR 27-MAR-1998; 98US-0079663P.  
PR 27-MAR-1998; 98US-0079664P.  
PR 27-MAR-1998; 98US-0079689P.  
PR 27-MAR-1998; 98US-0079728P.  
PR 27-MAR-1998; 98US-0079786P.  
PR 30-MAR-1998; 98US-0079920P.  
PR 30-MAR-1998; 98US-0079923P.  
PR 26-JUN-1998; 98US-00105943.  
PR 07-OCT-1998; 98US-00168978.  
PR 07-OCT-1998; 98WO-US021141.

PR 02-NOV-1998; 98US-00184216.  
 PR 06-NOV-1998; 98US-00187368.  
 PR 20-NOV-1998; 98MO-US024855.  
 PR 07-DEC-1998; 98US-00202054.  
 PR 22-DEC-1998; 98US-00218517.  
 PR 05-JAN-1999; 99MO-US000106.  
 PR 05-MAR-1999; 99US-00254465.  
 PR 08-MAR-1999; 99MO-US005028.  
 PR 10-MAR-1999; 99US-00265686.  
 PR 10-MAR-1999; 99MO-US005190.  
 PR 12-MAR-1999; 99US-00267213.  
 PR 12-APR-1999; 99US-00284291.  
 PR 14-MAY-1999; 99US-00311832.  
 PR 14-MAY-1999; 99MO-US010733.  
 PR 02-JUN-1999; 99MO-US012252.  
 PR 25-AUG-1999; 99US-00380137.  
 PR 25-AUG-1999; 99US-00380138.  
 PR 30-NOV-1999; 99US-00380142.  
 PR 30-NOV-1999; 99MO-US028313.  
 PR 02-DEC-1999; 99MO-US028551.  
 PR 16-DEC-1999; 99MO-US030095.  
 PR 30-DEC-1999; 99MO-US031243.  
 PR 05-JAN-2000; 2000MO-US000219.  
 PR 05-JAN-2000; 2000MO-US000277.  
 PR 06-JAN-2000; 2000MO-US000376.  
 PR 11-FEB-2000; 2000MO-US003565.  
 PR 18-FEB-2000; 2000MO-US004341.  
 PR 24-FEB-2000; 2000MO-US005004.  
 PR 01-MAR-2000; 2000MO-US005601.  
 PR 02-MAR-2000; 2000MO-US005841.  
 PR 10-MAR-2000; 2000MO-US006319.  
 PR 21-MAR-2000; 2000MO-US007532.  
 PR 30-MAR-2000; 2000MO-US008439.  
 PR 17-MAY-2000; 2000MO-US013705.  
 PR 22-MAY-2000; 2000MO-US014042.  
 PR 30-MAY-2000; 2000MO-US014941.  
 PR 02-JUN-2000; 2000MO-US015264.  
 PR 28-JUL-2000; 2000MO-US020710.  
 PR 24-AUG-2000; 2000MO-US023328.  
 PR 08-NOV-2000; 2000MO-US0709238.  
 PR 10-NOV-2000; 2000MO-US030873.  
 PR 27-NOV-2000; 2000US-00723749.  
 PR 01-DEC-2000; 2000MO-US032678.  
 PR 20-DEC-2000; 2000US-00747259.  
 PR 28-FEB-2001; 2000MO-US034956.  
 PR 22-MAR-2001; 2001US-00816744.  
 PR 22-MAR-2001; 2001US-00816930.  
 PR 22-MAR-2001; 2001MO-US009552.  
 PR 10-MAY-2001; 2001US-00854208.  
 PR 10-MAY-2001; 2001US-00854280.  
 PR 25-MAY-2001; 2001MO-US017092.  
 PR 01-JUN-2001; 2001US-00872035.  
 PR 01-JUN-2001; 2001MO-US017800.  
 PR 03-JUN-2001; 2001US-00874593.  
 PR 14-JUN-2001; 2001US-00882636.  
 PR 19-JUN-2001; 2001US-00886342.  
 PR 20-JUN-2001; 2001MO-US019692.  
 PR 29-JUN-2001; 2001MO-US021066.  
 PR 09-JUL-2001; 2001MO-US021735.  
 PR 30-JUL-2001; 2001US-00918585.  
 XX  
 PA (GENTH ) GENENTECH INC.  
 XX  
 PI Aehkenazi AJ, Baker KP, Botstein D, Desnovers L, Eaton DL;  
 PI Ferrara N, Filvaroff E, Fong S, Geo W, Gether H, Gerritsen ME;  
 PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
 PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
 PI Stewart TA, Tumes D, Williams PM, Wood WI;  
 XX  
 DR WPI; 2003-341189/32.

XX  
 PT New genes and secreted and transmembrane polypeptides (e.g. PRO337 or  
 PT PRO1559), useful for treating or diagnosing e.g. cancers.  
 PT atherosclerosis, infertility, stroke, encephalitis, hepatitis or multiple  
 PT sclerosis in mammals.  
 XX  
 PS Example 114; Page 192; 460pp; English.  
 XX  
 CC The invention relates to a new isolated nucleic acid molecule comprising a  
 CC sequence with at least 80% identity to: (a) a nucleotide encoding any of  
 CC 94 PRO polypeptides whose sequences are fully defined in the  
 CC specification; or (b) any of 94 nucleotide sequences fully defined in the  
 CC specification; or the full length coding sequence of any these 94  
 CC nucleotide sequences. Also included are an isolated PRO polypeptide  
 CC scoring at least 80% positives when compared to any of the PRO  
 CC polypeptide sequences cited above (or an isolated PRO polypeptide having  
 CC at least 80% amino acid sequence identity to: (a) an amino acid sequence  
 CC encoded by the nucleotide deposited with ATCC numbers listed in the  
 CC specification; (b) the PRO polypeptide, lacking its associated signal  
 CC peptide; or (c) an extracellular domain of the PRO polypeptide, with or  
 CC lacking its associated signal peptide), a vector comprising the nucleic  
 CC acid molecule, a host cell comprising the vector (and producing a PRO  
 CC polypeptide), a chimeric molecule comprising the PRO polypeptide fused  
 CC to a heterologous amino acid sequence and an anti-PRO antibody. The PRO  
 CC polypeptides or polynucleotides are useful as pharmaceuticals,  
 CC diagnostics, biosensors or bioreactors. These are particularly useful for  
 CC detecting or treating e.g. malignancies or cancers (e.g. ovarian cancer,  
 CC colorectal cancer, sarcoma, leukemia or lymphoma), inflammatory disease,  
 CC necrosis, atherosclerosis, infertility, premature aging, psoriasis,  
 CC inflammatory disease, renal disease, arthritis, immune-mediated alopecia,  
 CC stroke, encephalitis, hepatitis, or multiple sclerosis in mammals. The  
 CC PRO polypeptides are useful in drug screening, particularly as targets  
 CC for therapeutic intervention in these diseases, and in the diagnostic  
 CC determination of the presence of these diseases. The PRO polypeptides are  
 CC also useful as molecular weight markers, or for chromosome  
 CC identification. The PRO genes are useful as hybridisation probes, or for  
 CC screening libraries of human cDNA, genomic DNA or mRNA. The PRO genes may  
 CC also be used in gene therapy, particularly for replacing a defective  
 CC gene. The present sequence is a Taqman PCR probe used in a Northern blot  
 CC experiment to detect PRO sequences in certain cancer cell lines  
 CC  
 XX  
 SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Oy 395 GCGCGAAGCCCGCAGGTC 414  
 Db 20 GCGCGAAGCCTTCAGGTC 1  
 RESULT 330  
 ACCT9578  
 ID ACC79578 standard; DNA; 21 BP.  
 AC  
 ACCT9578;  
 XX  
 DT 05-AUG-2003 (first entry)  
 XX  
 DE Triplex forming oligonucleotide (TFO) module 1 oligonucleotide.  
 XX  
 KW Gene expression control; regulatory peptide; selectively suppress;  
 KW cancer; gene therapy; gene expression; regulation; suppression;  
 KW modulation; triplex forming oligonucleotide; TFO; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO2003033701-A1.  
 XX  
 PD 24-APR-2003.  
 XX  
 PF 11-OCT-2002; 2002MO-GB004633.

XX 11-OCT-2001; 2001GB-00024391.  
XX (GENE-) GENE EXPRESSION TECHNOLOGIES LTD.  
XX  
PI Hart S, Ali S, Pufong BT, Porter ACG, Buluwela L, Vainikka S;  
PI Jenkinson JD, Kanda P;  
XX WPI; 2003-372329/35.  
PT Suppressing or modulating the expression of a selected gene in a cell  
PT comprises introducing into the cell a molecule comprising a nucleic acid  
PT binding portion, and an expression repressor portion or a modifying  
PT portion.  
XX  
PS Example 1; Page 44; 98pp; English.  
XX The present invention describes a method for suppressing or modulating  
CC the expression of a selected gene in a cell. The method comprises  
CC introducing into the cell a molecule comprising a nucleic acid binding  
CC portion which binds to a site at or associated with the selected gene  
CC which site is present in a genome, and an expression repressor portion or  
CC a modifying portion. The nucleic acid binding portion comprises an  
CC oligonucleotide or oligonucleotide mimic or analogue. The repressor  
CC portion comprises a polypeptide or peptidomimetic. The modifying portion  
CC also comprises a polypeptide or peptidomimetic that is capable of  
CC modulating covalent modification of nucleic acid or chromatin and is not  
CC an endonuclease. The method is useful in controlling gene expression  
CC using a complex of an oligonucleotide and a regulatory peptide. The  
CC ability to selectively suppress the expression of a gene is useful in  
CC many areas of biology, such as in methods of treatment where the  
CC expression of the gene may be undesirable (e.g. cancer), in preparing  
CC models of disease and in modifying the phenotype in order to produce  
CC desirable properties. The molecule is useful in manufacturing an agent or  
CC a medicament for modulating or suppressing the expression of the selected  
CC gene in a patient or in an animal cell. The method is useful in gene  
CC therapy. The present sequence represents a triplex forming  
CC oligonucleotide (TFO) module 1 oligonucleotide, which is used in an  
CC example from the present invention  
XX  
SQ Sequence 21 BP; 10 A; 0 C; 10 G; 1 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1529 AAAGTAAAGGAGGAGG 1548  
DB 1 AAAGTAAAGGAGGAGG 20  
RESULT 331  
ADA25103/C  
ID ADA25103 standard; DNA; 21 BP.  
XX  
XX ADA25103;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Secreted and transmembrane PRO protein associated probe #91.  
XX  
XX Human; secreted and transmembrane protein; PRO; gene; ss; tissue typing;  
XX chromosome identification; vaccine; cancer; retinal disorder;  
XX sports-related joint disorder; osteoarthritis; rheumatoid arthritis;  
XX wound healing; obesity; diabetes; hearing loss;  
XX cardiac insufficiency disorder; kidney disorder; nervous system disorder;  
XX haemoglobin associated disorder; expressed sequence tag; EST.  
XX  
XX Homo sapiens.  
XX OS  
XX US2003050241-A1.  
XX  
XX 13-MAR-2003.  
PD

XX 16-OCT-2001; 2001US-00978564.  
XX  
XX 17-OCT-1997; 97US-0062250P.  
PR 03-NOV-1997; 97US-0064249P.  
PR 13-NOV-1997; 97US-0065311P.  
PR 21-NOV-1997; 97US-0066364P.  
PR 10-MAR-1998; 98US-0077450P.  
PR 11-MAR-1998; 98US-0077632P.  
PR 11-MAR-1998; 98US-0077641P.  
PR 11-MAR-1998; 98US-0077649P.  
PR 12-MAR-1998; 98US-0077791P.  
PR 13-MAR-1998; 98US-0078004P.  
PR 20-MAR-1998; 98US-0078886P.  
PR 20-MAR-1998; 98US-0078910P.  
PR 20-MAR-1998; 98US-0078936P.  
PR 20-MAR-1998; 98US-0078939P.  
PR 25-MAR-1998; 98US-0079294P.  
PR 26-MAR-1998; 98US-0079566P.  
PR 27-MAR-1998; 98US-0079663P.  
PR 27-MAR-1998; 98US-0079664P.  
PR 27-MAR-1998; 98US-0079689P.  
PR 27-MAR-1998; 98US-0079728P.  
PR 27-MAR-1998; 98US-0079786P.  
PR 30-MAR-1998; 98US-0079920P.  
PR 30-MAR-1998; 98US-0079923P.  
PR 31-MAR-1998; 98US-0080105P.  
PR 31-MAR-1998; 98US-0080107P.  
PR 31-MAR-1998; 98US-0080155P.  
PR 31-MAR-1998; 98US-0080194P.  
PR 01-APR-1998; 98US-0080327P.  
PR 01-APR-1998; 98US-0080328P.  
PR 01-APR-1998; 98US-0080333P.  
PR 01-APR-1998; 98US-0080334P.  
PR 08-APR-1998; 98US-0081049P.  
PR 08-APR-1998; 98US-0081070P.  
PR 08-APR-1998; 98US-0081071P.  
PR 09-APR-1998; 98US-0081195P.  
PR 09-APR-1998; 98US-0081203P.  
PR 09-APR-1998; 98US-0081229P.  
PR 15-APR-1998; 98US-0081817P.  
PR 15-APR-1998; 98US-0081819P.  
PR 15-APR-1998; 98US-0081838P.  
PR 15-APR-1998; 98US-0081952P.  
PR 15-APR-1998; 98US-0081955P.  
PR 21-APR-1998; 98US-0082568P.  
PR 21-APR-1998; 98US-0082569P.  
PR 22-APR-1998; 98US-0082700P.  
PR 22-APR-1998; 98US-0082704P.  
PR 22-APR-1998; 98US-0082797P.  
PR 22-APR-1998; 98US-0082804P.  
PR 23-APR-1998; 98US-0082796P.  
PR 27-APR-1998; 98US-0083366P.  
PR 28-APR-1998; 98US-0083322P.  
PR 29-APR-1998; 98US-0083392P.  
PR 29-APR-1998; 98US-0083495P.  
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XX Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gertlissen ME,
XX Goddard A, Godowski PJ, Grimaldi JC, Gunney AL, Hillan KJ,
XX Kljavin LJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL,
XX Stewart TA, Tumas D, Williams PM, Wood WI,
XX WPI; 2003-521814/49.
XX
XX New isolated PRO polypeptides for example extracellular, secreted and
XX membrane bound proteins, useful for modulating the biological activities
XX of cells and for treating, for example diabetes, cancer, rheumatoid
XX arthritis, and hearing loss.
XX
XX Example 114; Page 193; 461pp; English.
XX
XX The invention describes an isolated secreted and transmembrane (PRO)
XX polypeptide (I). PRO337 polypeptide is useful for detecting PRO4993
XX polypeptide in a sample, and vice versa. PRO725, PRO700 and PRO739 are
XX useful for detecting PRO1559 polypeptide in a sample, and PRO1559 is
XX useful for detecting PRO725, PRO700 and PRO739 in a sample. PRO4993 is
XX useful for linking a bioactive molecule to a cell expressing a PRO337
XX polypeptide, and PRO337 is useful for linking a bioactive molecule to a
XX cell expressing a PRO4993 polypeptide. PRO1559 is useful for linking a
XX bioactive molecule to a cell expressing a PRO735, PRO700 and PRO739
XX polypeptide, and PRO735, PRO700 and PRO739 polypeptides are useful for
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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XX QY 395 GCGCGAAGCCCGGAGGTC 414
XX Db 20 GCGCGAAGCCCGGAGGTC 1
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XX RESULT 332
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XX ID ACD30078 standard; DNA; 21 BP.
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XX AC ACD30078;
XX
XX DT 08-SEP-2003 (first entry)
XX
XX DE Novel human secreted and transmembrane protein related probe #91.
XX
XX KW Human; secreted and transmembrane protein; PRO; cell death; neuropathy;
XX peripheral neuropathy; diabetic peripheral neuropathy;
XX AIDS-associated neuropathy; Charcot-Marie-Tooth disease;
XX Kretzschmar's disease; Abetalipoproteinemia; Tanager disease;
XX Dejerine-Sottas syndrome; Metachromatic leukodystrophy; Fabry's disease;
XX probe; ss.
XX
XX OS Homo sapiens.
XX
XX XX US2003050240-A1.
XX
XX PN 13-MAR-2003.
XX
XX PD 16-OCT-2001; 2001US-00978403.
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XX PF 17-OCT-1997; 97US-0062250P.
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XX (GETH ) GENENTECH INC.  
PA  
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gertlsen ME;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
PI Kijavlin JV, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
PI Stewart TA, Tumas D, Williams PM, Wood WL;  
XX WPI; 2003-503575/47.  
DR  
XX Novel secreted and transmembrane polypeptide for modulating biological  
PT activity of cell expressing the polypeptide, identifying agonists or  
PT antagonists of polypeptide, and as molecular weight markers.  
PS Example 114; Page 190; 459pp; English.  
XX  
CC The invention describes an isolated, secreted and transmembrane  
CC polypeptide, termed PRO polypeptide (I). (I) is useful for detecting  
CC PRO4993, PRO337, PRO1559, PRO725, PRO700 or PRO739 polypeptide, and for  
CC linking a bioactive molecule to a cell expressing the above polypeptides.  
CC The bioactive molecule is a toxin, radiolabel or an antibody and causes  
CC cell death. (I) is useful as therapeutic agent, in medical and industrial  
CC applications e.g. for treating neuropathy, especially peripheral  
CC neuropathy, diabetic peripheral neuropathy, AIDS-associated neuropathy,  
CC Charcot-Marie-Tooth disease, Refsum's disease, Abetalipoproteinaemia,  
CC Tangier disease, Krabbe's disease, Metachromatic leukodystrophy, Fabry's

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
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DT 06-NOV-2003 (first entry)  
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KW probe; ss; inflammatory disease; organ failure; atherosclerosis;  
KW cardiac injury; infertility; birth defect; premature aging; AIDS; cancer;  
KW diabetic complication; tissue typing; human.  
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PR 16-JUN-1999; 99US-0139557P.  
PR 23-JUN-1999; 99US-0141037P.  
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PR 25-AUG-1999; 99US-00380137.  
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PR 29-OCT-1999; 99US-0162506P.  
PR 30-NOV-1999; 99WO-US028313.  
PR 02-DEC-1999; 99WO-US028551.  
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PR 16-DEC-1999; 99WO-US030085.  
PR 30-DEC-1999; 99WO-US031243.  
PR 30-DEC-1999; 99WO-US031274.  
PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000277.  
PR 06-JAN-2000; 2000WO-US000376.  
PR 11-FEB-2000; 2000WO-US003565.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 02-MAR-2000; 2000WO-US005841.  
PR 10-MAR-2000; 2000WO-US006319.  
PR 21-MAR-2000; 2000WO-US007532.  
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PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.  
PR 30-MAY-2000; 2000WO-US014941.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 28-JUL-2000; 2000WO-US020710.  
PR 24-AUG-2000; 2000WO-US023338.  
PR 08-NOV-2000; 2000US-00709238.  
PR 27-NOV-2000; 2000US-00723749.  
PR 01-DEC-2000; 2000WO-US032678.  
PR 20-DEC-2000; 2000US-00747259.  
PR 20-DEC-2000; 2000WO-US034956.  
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PR 30-JUL-2001; 2001US-00918585.  
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XX Ashkenazi AJ, Baker KP, Botstein D, Deansoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;  
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KW sport-related joint problem; articular cartilage defect; osteoarthritis;  
KW rheumatoid arthritis; wound healing; obesity; diabetes; insulinemia;  
KW kidney disorder; mesangial cell function; Berger disease; nephropathy;  
KW celiac disease; dermatitis; Crohn disease; neuropathy;  
KW cardiac insufficiency disorder; peripheral neuropathy;  
KW diabetic peripheral neuropathy; autonomic neuropathy;  
KW reduced motility of the gastrointestinal tract;  
KW atony of the urinary bladder; post polio syndrome; Krabbe's disease;  
KW Charcot-Marie-Tooth disease; Fabry's disease; Tangle disease;  
KW Refsum's disease; probe; ss.  
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KW Chromosome mapping; gene mapping; genetic disorder; septic shock;  
KW antibacterial; immunosuppressive; neuroprotective; probe; ss.  
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DT 04-DEC-2003 (first entry)  
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KW Human; PRO polypeptide; secreted protein; transmembrane protein;  
KW cell death; neuropathy; neuropathy related disease;  
KW Charcot-Marie-Tooth disorder; Retsum's disease; Krabbe's disease;  
KW chromosome mapping; gene mapping; genetic disorder; septic shock;  
KW antibacterial; immunosuppressive; neuroprotective; db.  
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XX  
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PD 01-MAY-2003.  
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 PR 09-JUL-2001; 2001WO-US021735.  
 PR 30-JUL-2001; 2001US-00918585.  
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 PA (GENTH ) GENENTECH INC.  
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 PI Ashkenazi AJ, Baker KP, Botstein D, Deenoyers L, Eaton DL;  
 PI Ferrara N, Filvaroff E, Fong S, Gerber H, Gertitsen MR;  
 PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
 PI Kijavrin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL,  
 PI Stewart TA, Tumas D, Williams PM, Wood WI;  
 XX  
 DR WPI; 2003-755118/71.  
 XX  
 PT New PRO polypeptides useful for treating peripheral neuropathy.  
 PT Neuropathies associated with systemic disease such as post-polio syndrome  
 PT or AIDS-associated syndrome.  
 PT  
 XX  
 PS Disclosure; SEQ ID NO 564; 425bp; English.  
 PS  
 XX The present invention relates to the isolation of novel human PRO  
 CC polypeptides, and the polynucleotide sequences encoding them. The PRO  
 CC polypeptides are secreted and transmembrane proteins. The PRO  
 CC polypeptides are useful for detecting other PRO polypeptides, for linking  
 CC bioactive molecules to cells expressing PRO polypeptides, for modulating  
 CC biological activities of cells expressing PRO polypeptides, and for  
 CC identifying agonists or antagonists. The bioactive molecule maybe a  
 CC toxin, radiolabel or antibody, and cause cell death. The PRO polypeptides  
 CC are useful for treating neuropathy and neuropathy related diseases such  
 CC as Charcot-Marie-Tooth disorder, Refsum's disease, and Krabbe's disease.  
 CC The polynucleotide sequences encoding PRO polypeptides are useful as  
 CC hybridisation probes, in chromosome and gene mapping, in the generation  
 CC of antisense RNA and DNA, in the preparation of PRO polypeptides, for

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 395 GGGCGAGCGCCGAGGCTC 414  
DB 20 GGGCGAGCGCCCTCAGGCTC 1

RESULT 337  
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KW auditory; tumour growth; rectal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
XX  
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KW optthalmological; antiarthritic; osteopathic; antineumatic; vulnary;  
KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
XX  
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XX  
PN US2003049684-A1.  
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PR 22-APR-1998; 98US-0082804P.  
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PR 16-DEC-1999; 99US-0030095.  
PR 30-DEC-1999; 99US-0031243.  
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PR 24-FEB-2000; 2000US-0000504.  
PR 02-MAR-2000; 2000US-00005841.  
PR 10-MAR-2000; 2000US-00006319.  
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PR 28-JUL-2000; 2000US-0020710.  
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PR 08-NOV-2000; 2000US-00709238.  
PR 27-NOV-2000; 2000US-00723749.  
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PR 28-FEB-2001; 2001US-00806520.  
PR 22-MAR-2001; 2001US-00816744.  
PR 22-MAR-2001; 2001US-00816920.  
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PR 05-JUN-2001; 2001US-00874503.  
PR 14-JUN-2001; 2001US-00882636.  
PR 19-JUN-2001; 2001US-00886342.  
PR 20-JUN-2001; 2001US-0089592.  
PR 29-JUN-2001; 2001US-00902106.  
PR 09-JUL-2001; 2001US-009021735.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
XX (GETH ) GENENTECH INC.  
XX  
XX Ashkenazi AJ, Baker KP, Botstein D, Desnovers L, Eaton DL;  
PI  
Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 395 GGGCGAAGCCCGGAGGATC 414  
Db 20 GGGCGAGAGCTTCAGGATC 1  
RESULT 339  
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ID AD63936 standard; DNA; 21 BP.  
XX  
AC AD63936;

XX 18-DEC-2003 (first entry)  
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XX  
XX Human; BG; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
KW opthalmological; ankyrathritic; osteopathic; antirheumatic; vitreary;  
KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
XX  
XX Homo sapiens.  
XX  
XX US2003054405-A1.  
XX  
XX PD 20-MAR-2003.  
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XX PF 24-OCT-2001; 2001US-00999833.  
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XX 17-OCT-1997; 97US-0062250P.  
XX 03-NOV-1997; 97US-0064249P.  
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XX 23-APR-1998; 98US-0082796P.  
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PR 24-FEB-2000; 2000WO-US005004.  
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PR 01-JUN-2001; 2001WO-US017800.  
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PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
PA (GETH ) GENENTECH INC.  
XX

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred.No.3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 395 GCGCGAGCGCCGCGAGGTC 414  
Db 20 GCGCGAGCGCCTTCAGGGTC 1

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XX AC ADC67036;  
XX DT 18-DEC-2003 (first entry)  
XX DE Human PRO 362 Tagman PCR probe.  
XX DE  
KW vulnerability; virucide; neuroprotective; cytosstatic; gene therapy;  
KW tumour cell proliferation inhibitor;

KW secreted and transmembrane protein; PRO; viral infection; wound healing;  
KW tissue growth; muscle generation; muscle regeneration;  
KW amyotrophic lateral sclerosis; neuropathy; AIDS-associated neuropathy;  
KW diabetic peripheral neuropathy; chromosome identification; antagonist;  
KW tissue typing; immunohistochemical staining; probe; ss.  
XX OS Homo sapiens.  
XX PN US2003060406-A1.  
XX PD 27-MAR-2003.  
XX PF 30-JUL-2001; 2001US-00918585.  
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PR 26-MAR-1998; 98US-0079656P.  
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PR 07-OCT-1998; 98WO-US021141.  
PR 02-NOV-1998; 98US-00184216.  
PR 06-NOV-1998; 98US-00187368.  
PR 20-NOV-1998; 98WO-US024855.  
PR 07-DEC-1998; 98US-00202054.  
PR 22-DEC-1998; 98US-00218517.  
PR 05-JAN-1999; 99WO-US000106.  
PR 05-MAR-1999; 99US-00254465.  
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PR 10-MAR-1999; 99US-00265686.  
PR 10-MAR-1999; 99WO-US005190.  
PR 12-MAR-1999; 99US-00267213.  
PR 12-APR-1999; 99US-00284291.  
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PR 14-MAY-1999; 99WO-US010733.  
PR 02-JUN-1999; 99WO-US012252.  
PR 25-AUG-1999; 99US-00380137.  
PR 25-AUG-1999; 99US-00380138.  
PR 25-AUG-1999; 99US-00380142.  
PR 30-NOV-1999; 99WO-US028313.  
PR 02-DEC-1999; 99WO-US028551.  
PR 02-DEC-1999; 99WO-US028565.  
PR 16-DEC-1999; 99WO-US030095.  
PR 30-DEC-1999; 99WO-US031243.  
PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000377.  
PR 06-JAN-2000; 2000WO-US000376.  
PR 11-FEB-2000; 2000WO-US003565.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 02-MAR-2000; 2000WO-US005841.

PR 10-MAR-2000; 2000WO-US006319.  
PR 21-MAR-2000; 2000WO-US007532.  
PR 30-MAR-2000; 2000WO-US008439.  
PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.  
PR 30-MAY-2000; 2000WO-US014941.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 28-JUL-2000; 2000WO-US020710.  
PR 24-AUG-2000; 2000WO-US023348.  
PR 08-NOV-2000; 2000WO-US0709238.  
PR 27-NOV-2000; 2000US-00723749.  
PR 01-DEC-2000; 2000WO-US032678.  
PR 20-DEC-2000; 2000US-00747259.  
PR 20-DEC-2000; 2000WO-US034956.  
PR 28-FEB-2001; 2001WO-US006520.  
PR 22-MAR-2001; 2001US-00816744.  
PR 22-MAR-2001; 2001US-00816920.  
PR 22-MAR-2001; 2001WO-US009552.  
PR 10-MAY-2001; 2001US-00854208.  
PR 10-MAY-2001; 2001US-00854280.  
PR 25-MAY-2001; 2001WO-US017092.  
PR 01-JUN-2001; 2001US-00872035.  
PR 01-JUN-2001; 2001WO-US017800.  
PR 05-JUN-2001; 2001US-00874593.  
PR 14-JUN-2001; 2001US-00882636.  
PR 19-JUN-2001; 2001US-00886342.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.

XX (GERTH ) GENENTECH INC.

XX Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gunney AL, Hillan KJ;  
PI Kljavin LJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
PI Stewart TA, Tumas D, Williams PM, Wood WI;  
XX

DR WPI; 2003-596568/56.

XX Novel secreted and transmembrane polypeptides and polynucleotides  
PT encoding them, useful for treating wound healing, tissue growth and  
PT muscle generation and regeneration, amyotrophic lateral sclerosis or  
PT neuropathy.

XX Example 114; SEQ ID NO 564; 472pp; English.

XX The invention describes an isolated secreted and transmembrane PRO  
CC polypeptide (I). PRO polypeptide such as PRO213, PRO700, PRO320 or PRO615  
CC is useful in biotechnological and medical research, as well as in various  
CC industrial applications. PRO polypeptide such as PRO300, PRO866, PRO703,  
CC PRO708, PRO320, PRO351, PRO352, PRO381, PRO615, PRO618, PRO772, PRO853,  
CC PRO860 or PRO846 is useful for therapeutic purposes. PRO363 is useful  
CC therapeutically in vivo for lessening the effects of viral infection.  
CC PRO200 is useful for the treatment of wound healing, tissue growth and  
CC muscle generation and regeneration. PRO337 is useful for treating  
CC amyotrophic lateral sclerosis, neuropathy, AIDS-associated neuropathy or  
CC diabetic peripheral neuropathy. A polynucleotide (II) encoding (I) is  
CC useful for generating transgenic animals or knockout animals which are  
CC useful in the development and screening of therapeutically useful  
CC reagents, as probes for generating a pool of sequences for identifying  
CC related PRO coding sequences, and to construct hybridisation probes for  
CC mapping the gene which encodes the PRO and for the genetic analysis of  
CC individuals with genetic disorders, for recombinantly expressing (I) and  
CC for chromosome identification. (I) is useful as molecular marker for  
CC protein electrophoresis purposes, and as therapeutic agents. (I) is also  
CC useful for screening compounds to identify those that mimic the PRO  
CC polypeptide (agonists) or prevent the effect of the PRO polypeptide  
CC (antagonists). (I) and (II) are useful for tissue typing. PRO antibodies  
CC are useful for immunohistochemical staining and/or assay of sample  
CC fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g.  
CC detecting its expression in specific cells, tissues or serum, and for  
CC affinity purification of PRO from recombinant cell culture or natural

CC sources. This sequence represents a human secreted and transmembrane PRO  
CC protein associated probe.  
XX  
SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
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Db 20 GGCCGAGGCTTCAGGCTC 1

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AC ADC69160;

DT 18-DEC-2003 (first entry)

DE Human PRO 362 Tagman PCR probe.

XX Human; seq; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
KM ophtalmological; antiarthritic; osteopathic; antirheumatic; vulnary;  
KM auditory; tumour growth; retinal disorder; sports-related joint problem;  
KM articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.

XX Homo sapiens.

OS US2003064407-A1.

PN 03-APR-2003.

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(GETH ) GENENTECH INC.

XX Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

XX

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Query Match 1.1%; Score 15.2; DB 1; Length 21;  
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XX auditory; tumour growth; retinal disorder; sports-related joint problem;
XX articular cartilage defects; osteoarthritis; rheumatoid arthritis;
XX wound healing; hearing loss; probe; in situ hybridisation.
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PI Goddard A, Godowski FU, Grimaldi JC, Gurney AI, Hillan KJ;
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XX
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PT Novel secreted and transmembrane polypeptides, designated PRO
PT polypeptides, and polynucleotides encoding them useful for treating
PT kidney diseases, bone, cartilage and retinal disorders.
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PS Example 114; SEQ ID NO 564; 468bp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide) a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell
CC comprising the vector and producing PRO, a chimeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993.
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO780 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 395 GGCAGGAGCCCGAGGCTC 414
Db 20 GGCAGGAGCCCTCAGGCTC 1
RESULT 344
ADCA1605/c
ID ADCA1605 standard; DNA; 21 BP.
XX
AC ADCA1605;
XX
DT 18-DEC-2003 (first entry)
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XX Human PRO 362 Taqman PCR probe.  
XX  
XX Human; 89; PCR; secreted protein; transmembrane protein; PRO; cytostatic;  
KM ophthalmological; growth; arthritic; osteopathic; antirheumatic; vulnary;  
KM auditory; tumour; growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
XX  
XX Homo sapiens.  
XX US2003072745-A1.  
XX  
XX PD 17-APR-2003.  
XX  
XX PF 25-OCT-2001; 2001US-00013929.  
XX  
XX 17-OCT-1997; 97US-0062250P.  
XX 03-NOV-1997; 97US-0064249P.  
XX 13-NOV-1997; 97US-0065311P.  
XX 21-NOV-1997; 97US-0066364P.  
XX 10-MAR-1998; 98US-0077450P.  
XX 11-MAR-1998; 98US-0077632P.  
XX 11-MAR-1998; 98US-0077641P.  
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XX 25-MAR-1998; 98US-0079294P.  
XX 26-MAR-1998; 98US-0079655P.  
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XX 27-MAR-1998; 98US-0079689P.  
XX 27-MAR-1998; 98US-0079728P.  
XX 27-MAR-1998; 98US-0079786P.  
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XX 30-MAR-1998; 98US-0079923P.  
XX 31-MAR-1998; 98US-0080105P.  
XX 31-MAR-1998; 98US-0080107P.  
XX 31-MAR-1998; 98US-0080165P.  
XX 31-MAR-1998; 98US-0080194P.  
XX 01-APR-1998; 98US-0080327P.  
XX 01-APR-1998; 98US-0080328P.  
XX 01-APR-1998; 98US-0080334P.  
XX 01-APR-1998; 98US-0081049P.  
XX 08-APR-1998; 98US-0081070P.  
XX 08-APR-1998; 98US-0081071P.  
XX 09-APR-1998; 98US-0081195P.  
XX 09-APR-1998; 98US-0081203P.  
XX 09-APR-1998; 98US-0081229P.  
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XX 15-APR-1998; 98US-0081838P.  
XX 15-APR-1998; 98US-0081952P.  
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XX 21-APR-1998; 98US-0082569P.  
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XX 22-APR-1998; 98US-0082700P.  
XX 22-APR-1998; 98US-0082704P.  
XX 22-APR-1998; 98US-0082797P.  
XX 23-APR-1998; 98US-0082804P.  
XX 23-APR-1998; 98US-0082796P.  
XX 27-APR-1998; 98US-0083336P.  
XX 28-APR-1998; 98US-0083323P.  
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PR 29-APR-1998; 98US-0083545P.  
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PR 30-APR-1998; 98US-0083742P.  
PR 05-MAY-1998; 98US-0084366P.  
PR 06-MAY-1998; 98US-0084414P.  
PR 07-MAY-1998; 98US-0084598P.  
PR 07-MAY-1998; 98US-0084600P.  
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PR 28-MAY-1998; 98US-0087098P.  
PR 28-MAY-1998; 98US-0087106P.  
PR 28-MAY-1998; 98US-0087208P.  
PR 26-JUN-1998; 98US-0090863P.  
PR 26-JUN-1998; 98US-0091010P.  
PR 01-JUL-1998; 98US-0091359P.  
PR 30-JUL-1998; 98US-0094651P.  
PR 11-SEP-1998; 98US-0100038P.  
PR 07-OCT-1998; 98WO-US021141.  
PR 20-NOV-1998; 98US-0109304P.  
PR 20-NOV-1998; 98WO-US024855.  
PR 22-DEC-1998; 98US-0113296P.  
PR 23-DEC-1998; 98US-0113621P.  
PR 05-JAN-1999; 99WO-US000106.  
PR 08-MAR-1999; 99WO-US005028.  
PR 10-MAR-1999; 99WO-US005190.  
PR 12-MAR-1999; 99US-0123957P.  
PR 29-MAR-1999; 99US-0126773P.  
PR 21-APR-1999; 99US-0130232P.  
PR 26-APR-1999; 99US-0131022P.  
PR 28-APR-1999; 99US-0131445P.  
PR 14-MAY-1999; 99US-0134287P.  
PR 14-MAY-1999; 99WO-US010733.  
PR 02-JUN-1999; 99WO-US012252.  
PR 16-JUN-1999; 99US-0139555P.  
PR 23-JUN-1999; 99US-0141037P.  
PR 07-JUL-1999; 99US-0142680P.  
PR 26-JUL-1999; 99US-0145698P.  
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PR 29-OCT-1999; 99US-0162506P.  
PR 30-NOV-1999; 99WO-US028313.  
PR 02-DEC-1999; 99WO-US028551.  
PR 02-DEC-1999; 99WO-US028565.  
PR 16-DEC-1999; 99WO-US031243.  
PR 30-DEC-1999; 99WO-US031274.  
PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000277.  
PR 06-JAN-2000; 2000WO-US000365.  
PR 11-FEB-2000; 2000WO-US000376.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 24-FEB-2000; 2000WO-US005004.

PR 02-MAR-2000; 2000WO-US005841.  
PR 10-MAR-2000; 2000WO-US006319.  
PR 21-MAR-2000; 2000WO-US007532.  
PR 30-MAR-2000; 2000WO-US008439.  
PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.  
PR 30-MAY-2000; 2000WO-US014941.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 28-JUL-2000; 2000WO-US020710.  
PR 24-AUG-2000; 2000WO-US023328.  
PR 01-DEC-2000; 2000WO-US032678.  
PR 20-DEC-2000; 2000WO-US034856.  
PR 28-FEB-2001; 2001WO-US006520.  
PR 22-MAR-2001; 2001WO-US009552.  
PR 25-MAY-2001; 2001WO-US017092.  
PR 01-JUN-2001; 2001WO-US017800.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
XX (GETH ) GENENTECH INC.

PI Ashkenazi A, Baker KP, Bolstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gertlsen ME;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gunney AL, Hillan KJ;  
PI Kijavini IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
PI Stewart TA, Tumas D, Williams PM, Wood WI;  
XX  
XX WPI; 2003-743806/70.

PT Novel isolated secreted and transmembrane PRO polypeptides, useful in the  
PT preparation of a medication for treating a condition responsive to the  
PT polypeptide, and as therapeutic agents e.g. vaccines.

XX  
XX Example 114; SEQ ID NO 564; 466pp; English.

XX  
XX The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC to an amino acid sequence chosen from 94 fully defined sequences as given  
CC in the specification (including PRO lacking its associated signal  
CC peptide, a PRO extracellular domain with or without its associated signal  
CC peptide). Also included are nucleic acids encoding the PRO proteins  
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
CC comprising the vector and producing PRO, a chimaeric molecule comprising  
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 395 GCGCGAGGCCCGAGGCTC 414  
Db 20 GCGCGAGGCCCTTCAGGCTC 1

RESULT 345  
ID ADC67660/c  
XX ADC67660 standard; DNA; 21 BP.

XX  
XX ADC67660;

DT 18-DEC-2003 (first entry)

XX  
XX Human PRO 362 Tagman PCR probe.

XX  
XX vulnerable; virucide; neuroprotective; cytostatic; gene therapy;

KW tumour cell proliferation inhibitor;  
KW secreted and transmembrane protein; PRO; viral infection; wound healing;  
KW tissue growth; muscle generation; muscle regeneration;

KW amyotrophic lateral sclerosis; neuropathy; AIDS-associated neuropathy;  
KW diabetic peripheral neuropathy; chromosome identification; antagonistic;  
KW tissue typing; immunohistochemical staining; probe; ss.

XX Homo sapiens.

XX US2003073131-A1.

PD 17-APR-2003.

XX  
XX 25-OCT-2001; 2001US-00016177.

XX  
PR 17-OCT-1997; 97US-0062250P.  
PR 03-NOV-1997; 97US-0064249P.  
PR 13-NOV-1997; 97US-0065311P.  
PR 21-NOV-1997; 97US-0066364P.  
PR 10-MAR-1998; 97US-0077450P.  
PR 11-MAR-1998; 97US-0077632P.  
PR 11-MAR-1998; 97US-0077641P.  
PR 11-MAR-1998; 97US-0077649P.  
PR 12-MAR-1998; 97US-0077791P.  
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PR 22-MAY-1998; 98US-0086392P.
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PR 20-NOV-1998; 98WO-US024855.
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PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005120.
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PR 14-MAY-1999; 99WO-US01073P.
PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
PR 23-JUN-1999; 99US-0141037P.
PR 07-JUL-1999; 99US-0142680P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146223P.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.

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PR 22-MAY-2000; 2000WO-US014042.
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PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
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PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
XX (GETH ) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Geber H, Gerritsen ME,
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
XX WPI; 2003-743810/70.
XX
XX Novel isolated secreted and transmembrane PRO polypeptides, useful in the
PT preparation of a medicament for treating a condition responsive to the
PT polypeptide, and as therapeutic agents e.g. vaccines.
XX
XX Example 114; SEQ ID NO 564; 464pp; English.
XX
CC The invention describes an isolated secreted and transmembrane PRO
CC polypeptide (I). PRO polypeptide such as PRO213, PRO700, PRO320 or PRO615
CC is useful in biotechnological and medical research, as well as in various
CC industrial applications. PRO polypeptide such as PRO300, PRO866, PRO703,
CC PRO708, PRO320, PRO351, PRO381, PRO615, PRO772, PRO853,
CC PRO860 or PRO846 is useful for therapeutic purposes. PRO363 is useful
CC therapeutically in vivo for lessening the effects of viral infection.
CC PRO200 is useful for the treatment of wound healing, tissue growth and
CC muscle generation and regeneration. PRO337 is useful for treating
CC myotrophic lateral sclerosis, neuropathy, AIDS-associated neuropathy or
CC
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. NO.3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 395 GCGCGAAGCGCCGAGGATC 414
Db 20 GCGCGAAGCGCTTCAGGATC 1
RESULT 346
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AC AD62596;
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DT 18-DEC-2003 (first entry)
XX
DE Human PRO 362 Tagman PCR probe.
XX
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;
KW opthlalmological; antiarthritic; osteopathic; antirheumatic; vlnary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; probe; in situ hybridisation.
XX
OS Homo sapiens.
XX
XX US2003073624-A1.
XX
PD 17-APR-2003.

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XX 15-OCT-2001; 2001US-00978193.  
PF 17-OCT-1997; 97US-0062250P.  
PR 03-NOV-1997; 97US-0064249P.  
PR 13-NOV-1997; 97US-0065311P.  
PR 21-NOV-1997; 97US-0066364P.  
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PR 30-MAR-1998; 98US-0079923P.  
PR 31-MAR-1998; 98US-0080105P.  
PR 31-MAR-1998; 98US-0080107P.  
PR 31-MAR-1998; 98US-0080194P.  
PR 01-APR-1998; 98US-0080327P.  
PR 01-APR-1998; 98US-0080328P.  
PR 01-APR-1998; 98US-0080334P.  
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PR 08-APR-1998; 98US-0081070P.  
PR 08-APR-1998; 98US-0081071P.  
PR 09-APR-1998; 98US-0081195P.  
PR 09-APR-1998; 98US-0081203P.  
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PR 15-APR-1998; 98US-0081952P.  
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KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
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PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
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XX auditory; tumour growth; retinal disorder; sports-related joint problem;
XX articular cartilage defects; osteoarthritis; rheumatoid arthritis;
XX wound healing; hearing loss; probe; in situ hybridisation.
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PI Petracca N, Filvaroff E, Fong S, Gao W, Geider H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Klayman LJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TM, Tumas D, Williams PM, Wood WI;
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XX WPI; 2003-875641/81.
XX
XX New gene, and its encoded secreted and transmembrane polypeptides,
PT
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PT useful for treating e.g. lung or breast tumors, osteoarthritis,
PT rheumatoid arthritis, obesity, diabetes, hyperinsulinemia,
PT hyposulinemia or wounds.
XX
XX Example 114; SEQ ID NO 564; 462pp; English.
PS
XX
XX The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell
CC comprising the vector and producing PRO, a chimeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a Tagman PCR probe used investigate PRO
CC gene amplification in certain tumour cell lines.
XX
XX Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 395 GGCCGAAGCCCGCAGGCTC 414
Db 20 GGCCGAGAGCCTTCAGGCTC 1
RESULT 350
ADE16766/c
ID ADE16766 standard; DNA; 21 BP.
XX
XX ADE16766;
XX
XX 29-JAN-2004 (first entry)
XX
XX Human PRO 362 Tagman PCR probe.
XX
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosstatic;
XX opththmological; antiarthritic; osteopathic; antirheumatic; vlnnerary;
XX auditory; tumour growth; retinal disorder; sports-related joint problem;
XX articular cartilage defects; osteoarthritis; rheumatoid arthritis;
XX wound healing; hearing loss; probe; in situ hybridisation.
XX
XX Homo sapiens.
XX
XX New gene, and its encoded secreted and transmembrane polypeptides,
PT
```

PN US2003203435-A1.  
 XX 30-OCT-2003.  
 XX 18-OCT-2001; 2001US-00145092.  
 XX 30-APR-1998; 98US-0083742P.  
 PR 08-MAR-1999; 99WO-US005028.  
 PR 23-JUN-1999; 99US-0141037P.  
 PR 25-AUG-1999; 99US-00380138.  
 PR 18-FEB-2000; 2000WO-US004341.  
 PR 30-JUL-2001; 2001US-00918585.  
 XX (GETH ) GENENTECH INC.  
 PA Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
 PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;  
 PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
 PI Kijavrin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
 PI Stewart TA, Tumas D, Williams PM, Wood WI;  
 DR WPI; 2003-875642/81.  
 XX New genes, and its encoded secreted and transmembrane polypeptides,  
 PT useful for treating e.g. lung or breast tumors, osteoarthritis,  
 PT rheumatoid arthritis, obesity, diabetes, hyperinsulinemia,  
 PT hypotension or wounds.  
 PT Example 114; SEQ ID NO 564; 452bp; English.  
 PS  
 XX The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 94 fully defined sequences as given  
 CC in the specification (including PRO lacking its associated signal  
 CC peptide, a PRO extracellular domain with or without its associated signal  
 CC peptide). Also included are nucleic acids encoding the PRO proteins  
 CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
 CC comprising the vector and producing PRO, a chimeric molecule comprising  
 CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
 CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
 CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
 CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
 CC polypeptide. PRO700 or PRO739 polypeptide is useful for detecting  
 CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
 CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
 CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
 CC causes death of the cell. PRO337 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO4993 polypeptide. PRO725,  
 CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
 CC to a cell expressing PRO1559 polypeptide, and PRO1559 polypeptide is  
 CC useful for linking a bioactive molecule to a cell expressing PRO725,  
 CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
 CC polypeptide is useful for modulating at least one biological activity of  
 CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
 CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
 CC biological activity of the cell expressing PRO4993 polypeptide. PRO725,  
 CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
 CC modulating the biological activity of the cell expressing PRO1559  
 CC polypeptide, and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
 CC PRO739 polypeptide is useful for modulating the biological activity of  
 CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
 CC polypeptides are useful for inhibiting tumor growth, retinal disorders,  
 CC sports-related joint problems, articular cartilage defects,  
 CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
 CC mammals. The present sequence is a Tagman PCR probe used investigate PRO  
 CC gene amplification in certain tumor cell lines.  
 XX  
 XX Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. NO. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 395 GGCCGAGCCCGAGGATC 414  
 DB 20 GGCCGAGGCTTCAGGATC 1  
 RESULT 351  
 ADD73381/C  
 ID ADD73381 standard; DNA; 21 BP.  
 XX  
 AC ADD73381;  
 XX  
 DT 29-JAN-2004 (first entry)  
 DE  
 XX Human PRO 362 Tagman PCR probe.  
 XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;  
 KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnery;  
 KW audiology; tumor growth; retinal disorder; sports-related joint problem;  
 KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
 KW wound healing; hearing loss; probe; in situ hybridisation.  
 XX Homo sapiens.  
 OS  
 XX US2003203436-A1.  
 PN 30-OCT-2003.  
 PD  
 XX 18-OCT-2001; 2001US-00145129.  
 PF  
 XX 22-MAY-1998; 98US-0086414P.  
 PR 22-DEC-1998; 98US-0113296P.  
 PR 05-JAN-1999; 99WO-US000106.  
 PR 08-MAR-1999; 99WO-US005028.  
 PR 12-APR-1999; 99US-00284291.  
 PR 25-AUG-1999; 99US-00380138.  
 PR 18-FEB-2000; 2000WO-US004341.  
 PR 30-JUL-2001; 2001US-00918585.  
 XX (GETH ) GENENTECH INC.  
 PA Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
 PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;  
 PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
 PI Kijavrin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
 PI Stewart TA, Tumas D, Williams PM, Wood WI;  
 DR WPI; 2003-875643/81.  
 XX New PRO genes and encoded secreted and transmembrane polypeptides, useful  
 PT for treating e.g. lung or breast tumors, osteoarthritis, rheumatoid  
 PT arthritis, obesity, diabetes, hyperinsulinemia, hypotension or  
 PT wounds.  
 PT Example 114; SEQ ID NO 564; 453bp; English.  
 PS  
 XX The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 94 fully defined sequences as given  
 CC in the specification (including PRO lacking its associated signal  
 CC peptide, a PRO extracellular domain with or without its associated signal  
 CC peptide). Also included are nucleic acids encoding the PRO proteins  
 CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
 CC comprising the vector and producing PRO, a chimeric molecule comprising  
 CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
 CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
 CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
 CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
 CC polypeptide. PRO700 or PRO739 polypeptide is useful for detecting  
 CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
 CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
 CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule





CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects,  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
CC mammals. The present sequence is a Taqman PCR probe used investigate PRO  
CC gene amplification in certain tumour cell lines.

SO Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 395 GGCCGAGGCCCGCAGGGTC 414  
DB 20 GGCCGAGGCCCTTCAGGGTC 1

RESULT 353  
ADE17390/C  
ADE17390 standard; DNA; 21 BP.

XX ADE17390;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human PRO 362 Taqman PCR probe.  
XX  
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;  
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnery;  
KW audiology; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.

XX  
XX Homo sapiens.  
XX  
XX US2003203433-A1.  
XX  
PD 30-OCT-2003.  
XX  
PE 18-OCT-2001; 2001US-00145016.  
XX  
XX 06-MAY-1998; 98US-0084414P.  
PR 22-DEC-1998; 98US-0113296P.  
PR 05-JAN-1999; 99WO-US000106.  
PR 08-MAR-1999; 99WO-US005028.  
PR 12-APR-1999; 99US-00284291.  
PR 25-AUG-1999; 99US-00380138.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
XX (GETH ) GENENTECH INC.  
XX  
XX Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Rijnboff E, Fong S, Gao W, Garber H, Gerritsen ME;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
PI Kijavlin IO, Kuo SS, Napiet MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
PI Stewart TA, Tumae D, Williams PM, Wood WI;  
XX  
XX WPI, 2003-875640/B1.  
XX  
XX  
XX New genes, and its encoded secreted and transmembrane polypeptides,  
PI useful for treating e.g. lung or breast tumors, osteoarthritis,  
PI rheumatoid arthritis, obesity, diabetes, hyperinulinemia,  
PI hypoinulinemia or wounds.  
XX  
XX Example 114; SEQ ID NO 564; 459bp; English.  
XX  
XX The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC to an amino acid sequence chosen from 94 fully defined sequences as given  
CC in the specification (including PRO lacking its associated signal

CC peptide, a PRO extracellular domain with or without its associated signal  
CC peptide). Also included are nucleic acids encoding the PRO proteins  
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
CC comprising the vector and producing PRO, a chimeric molecule comprising  
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
CC antibody. PRO337 polypeptide is useful for detecting a PRO493  
CC polypeptide in a sample suspected of containing PRO493 polypeptide.  
CC Similarly, PRO493 polypeptide is useful for detecting PRO337  
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
CC PRO725, PRO700 or PRO739. PRO493 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
CC causes death of the cell. PRO337 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO493 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
CC useful for linking a bioactive molecule to a cell expressing PRO725,  
CC PRO700 or PRO739 polypeptide. PRO493 polypeptide or anti-PRO337  
CC polypeptide is useful for modulating at least one biological activity of  
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
CC polypeptide or anti-PRO493 polypeptide is useful for modulating the  
CC biological activity of the cell expressing PRO493 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
CC modulating the biological activity of the cell expressing PRO1559  
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects,  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
CC mammals. The present sequence is a Taqman PCR probe used investigate PRO  
CC gene amplification in certain tumour cell lines.

SO Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 395 GGCCGAGGCCCGCAGGGTC 414  
DB 20 GGCCGAGGCCCTTCAGGGTC 1

RESULT 354  
ADF47404/C  
ADF47404 standard; DNA; 21 BP.

XX ADF47404;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
XX Human PRO 362 Taqman PCR probe.  
XX  
XX  
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;  
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnery;  
KW audiology; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.

XX  
XX Homo sapiens.  
XX  
XX US2003195333-A1.  
XX  
XX 16-OCT-2003.  
XX  
XX 15-OCT-2001; 2001US-00978194.  
XX  
XX 17-OCT-1997; 97US-0062250P.  
PR 03-NOV-1997; 97US-0064249P.  
PR 13-NOV-1997; 97US-0065311P.  
PR 21-NOV-1997; 97US-0066364P.

PR 10-MAR-1998; 98US-0077450P.  
PR 11-MAR-1998; 98US-0077632P.  
PR 11-MAR-1998; 98US-0077641P.  
PR 11-MAR-1998; 98US-0077649P.  
PR 12-MAR-1998; 98US-0077791P.  
PR 13-MAR-1998; 98US-0078004P.  
PR 17-MAR-1998; 98US-00040220.  
PR 20-MAR-1998; 98US-0078886P.  
PR 20-MAR-1998; 98US-0078910P.  
PR 20-MAR-1998; 98US-0078936P.  
PR 20-MAR-1998; 98US-0078939P.  
PR 25-MAR-1998; 98US-0079294P.  
PR 26-MAR-1998; 98US-0079656P.  
PR 27-MAR-1998; 98US-0079663P.  
PR 27-MAR-1998; 98US-0079664P.  
PR 27-MAR-1998; 98US-0079689P.  
PR 27-MAR-1998; 98US-0079728P.  
PR 27-MAR-1998; 98US-0079786P.  
PR 27-MAR-1998; 98US-0079920P.  
PR 30-MAR-1998; 98US-0079923P.  
PR 31-MAR-1998; 98US-0080105P.  
PR 31-MAR-1998; 98US-0080107P.  
PR 31-MAR-1998; 98US-0080165P.  
PR 31-MAR-1998; 98US-0080194P.  
PR 01-APR-1998; 98US-0080327P.  
PR 01-APR-1998; 98US-0080328P.  
PR 01-APR-1998; 98US-0080331P.  
PR 01-APR-1998; 98US-0080334P.  
PR 08-APR-1998; 98US-0081049P.  
PR 08-APR-1998; 98US-0081070P.  
PR 08-APR-1998; 98US-0081071P.  
PR 09-APR-1998; 98US-0081195P.  
PR 09-APR-1998; 98US-0081203P.  
PR 09-APR-1998; 98US-0081229P.  
PR 15-APR-1998; 98US-0081819P.  
PR 15-APR-1998; 98US-0081838P.  
PR 15-APR-1998; 98US-0081952P.  
PR 15-APR-1998; 98US-0081955P.  
PR 21-APR-1998; 98US-0082568P.  
PR 21-APR-1998; 98US-0082569P.  
PR 22-APR-1998; 98US-0082700P.  
PR 22-APR-1998; 98US-0082704P.  
PR 22-APR-1998; 98US-0082797P.  
PR 22-APR-1998; 98US-0082804P.  
PR 23-APR-1998; 98US-0082796P.  
PR 27-APR-1998; 98US-0083336P.  
PR 28-APR-1998; 98US-0083322P.  
PR 29-APR-1998; 98US-0083392P.  
PR 29-APR-1998; 98US-0083495P.  
PR 29-APR-1998; 98US-0083496P.  
PR 29-APR-1998; 98US-0083499P.  
PR 29-APR-1998; 98US-0083500P.  
PR 29-APR-1998; 98US-0083554P.  
PR 29-APR-1998; 98US-0083558P.  
PR 29-APR-1998; 98US-0083559P.  
PR 30-APR-1998; 98US-0083742P.  
PR 05-MAY-1998; 98US-0084366P.  
PR 05-MAY-1998; 98US-0084414P.  
PR 06-MAY-1998; 98US-0084441P.  
PR 07-MAY-1998; 98US-0084598P.  
PR 07-MAY-1998; 98US-0084600P.  
PR 07-MAY-1998; 98US-0084627P.  
PR 07-MAY-1998; 98US-0084633P.  
PR 07-MAY-1998; 98US-0084639P.  
PR 07-MAY-1998; 98US-0084640P.  
PR 07-MAY-1998; 98US-0084643P.  
PR 13-MAY-1998; 98US-0085323P.  
PR 13-MAY-1998; 98US-0085338P.  
PR 13-MAY-1998; 98US-0085339P.  
PR 15-MAY-1998; 98US-0085577P.  
PR 15-MAY-1998; 98US-0085579P.

PR 15-MAY-1998; 98US-0085580P.  
PR 15-MAY-1998; 98US-0085582P.  
PR 15-MAY-1998; 98US-0085689P.  
PR 15-MAY-1998; 98US-0085697P.  
PR 15-MAY-1998; 98US-0085700P.  
PR 15-MAY-1998; 98US-0085704P.  
PR 16-MAY-1998; 98US-0086023P.  
PR 22-MAY-1998; 98US-0086392P.  
PR 22-MAY-1998; 98US-0086414P.  
PR 22-MAY-1998; 98US-0086430P.  
PR 22-MAY-1998; 98US-0086486P.  
PR 28-MAY-1998; 98US-0087098P.  
PR 28-MAY-1998; 98US-0087106P.  
PR 28-MAY-1998; 98US-0087208P.  
PR 26-JUN-1998; 98US-00105413.  
PR 26-JUN-1998; 98US-0090863P.  
PR 26-JUN-1998; 98US-0091010P.  
PR 01-JUL-1998; 98US-0091359P.  
PR 30-JUL-1998; 98US-0094651P.  
PR 11-SEP-1998; 98US-0100038P.  
PR 07-OCT-1998; 98US-00168978.  
PR 07-OCT-1998; 98WO-US021141.  
PR 02-NOV-1998; 98US-00184216.  
PR 06-NOV-1998; 98US-00187368.  
PR 20-NOV-1998; 98US-0109304P.  
PR 20-NOV-1998; 98WO-US024855.  
PR 07-DEC-1998; 98US-00202054.  
PR 22-DEC-1998; 98US-00218517.  
PR 22-DEC-1998; 98US-0113296P.  
PR 23-DEC-1998; 98US-0113621P.  
PR 05-JAN-1999; 99WO-US000106.  
PR 05-MAR-1999; 99US-00254465.  
PR 08-MAR-1999; 99WO-US005028.  
PR 10-MAR-1999; 99US-00265686.  
PR 10-MAR-1999; 99WO-US005190.  
PR 12-MAR-1999; 99US-00267213.  
PR 12-MAR-1999; 99US-0123957P.  
PR 29-MAR-1999; 99US-0126773P.  
PR 12-APR-1999; 99US-00284921.  
PR 21-APR-1999; 99US-0130232P.  
PR 26-APR-1999; 99US-0131022P.  
PR 28-APR-1999; 99US-0031445P.  
PR 14-MAY-1999; 99US-00311832.  
PR 14-MAY-1999; 99US-00380137.  
PR 14-MAY-1999; 99US-0145698P.  
PR 14-MAY-1999; 99US-0146222P.  
PR 14-MAY-1999; 99WO-US010733.  
PR 02-JUN-1999; 99WO-US012252.  
PR 16-JUN-1999; 99US-0139557P.  
PR 23-JUN-1999; 99US-0141037P.  
PR 07-JUL-1999; 99US-0142680P.  
PR 26-JUL-1999; 99US-0145698P.  
PR 28-JUL-1999; 99US-0146222P.  
PR 25-AUG-1999; 99US-00380138.  
PR 25-AUG-1999; 99US-00380142.  
PR 29-OCT-1999; 99US-0162506P.  
PR 30-NOV-1999; 99WO-US028313.  
PR 02-DEC-1999; 99WO-US028551.  
PR 02-DEC-1999; 99WO-US028565.  
PR 16-DEC-1999; 99WO-US030095.  
PR 30-DEC-1999; 99WO-US031243.  
PR 30-DEC-1999; 99WO-US031274.  
PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000277.  
PR 06-JAN-2000; 2000WO-US000376.  
PR 11-FEB-2000; 2000WO-US003565.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 02-MAR-2000; 2000WO-US005841.  
PR 10-MAR-2000; 2000WO-US006319.  
PR 21-MAR-2000; 2000WO-US007532.  
PR 30-MAR-2000; 2000WO-US008439.  
PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.

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PR 30-MAY-2000; 2000MO-US014941.
PR 02-JUN-2000; 2000MO-US015264.
PR 28-JUL-2000; 2000MO-US020710.
PR 24-AUG-2000; 2000MO-US023328.
PR 08-NOV-2000; 2000US-00709238.
PR 27-NOV-2000; 2000US-00723749.
PR 01-DEC-2000; 2000MO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000MO-US034956.
PR 28-FEB-2001; 2001MO-US006520.
PR 22-MAR-2001; 2001US-00816744.
PR 22-MAR-2001; 2001MO-US016920.
PR 22-MAR-2001; 2001MO-US009552.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001MO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001MO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001MO-US019692.
PR 29-JUN-2001; 2001MO-US021066.
PR 09-JUL-2001; 2001MO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
XX (GETH ) GENENTECH INC.
XX

Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. NO.3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 395 GCGCGAGCGCCGACGGGTC 414
Db 20 GCGCGAGCGCCTTCAGGGTC 1
|||||
|||||
|||||
|||||
|||||

RESULT 355
ADG53161/c
ID ADG53161 standard; DNA; 21 BP.
XX
AC ADG53161;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human PRO 362 Tagman PCR probe.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolatic;
KW ophthalmological; anirachitic; osteoparhic; antirheumatic; vulnetary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; probe; in situ hybridisation.
XX
OS Homo sapiens.
XX
FN US2003216561-A1.
XX
PD 20-NOV-2003.
XX
PF 25-OCT-2001; 2001US-00013927.
XX
XX 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.
PR 13-NOV-1997; 97US-0065311P.
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PR 27-MAR-1998; 98US-0079689P.
PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079766P.
PR 30-MAR-1998; 98US-0079920P.
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PR 31-MAR-1998; 98US-0080194P.
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PR 08-APR-1998; 98US-0081071P.
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PR 15-APR-1998; 98US-0081838P.
PR 15-APR-1998; 98US-0081952P.
PR 15-APR-1998; 98US-0081955P.
PR 21-APR-1998; 98US-0082568P.
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PR 22-APR-1998; 98US-0082797P.
PR 22-APR-1998; 98US-0082804P.
PR 23-APR-1998; 98US-0082796P.
PR 27-APR-1998; 98US-0083336P.
PR 28-APR-1998; 98US-0083322P.
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PR 30-APR-1998; 98US-0083742P.
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PR 30-JUL-1998; 98US-0094651P.  
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PR 05-JAN-1999; 99MO-US000106.  
PR 08-MAR-1999; 99MO-US005028.  
PR 10-MAR-1999; 99MO-US005190.  
PR 12-MAR-1999; 99US-0123957P.  
PR 29-MAR-1999; 99US-0126773P.  
PR 21-APR-1999; 99US-0130232P.  
PR 26-APR-1999; 99US-0131022P.  
PR 28-APR-1999; 99US-0131445P.  
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PR 14-MAY-1999; 99MO-US010733.  
PR 02-JUN-1999; 99MO-US012252.  
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PR 07-JUL-1999; 99US-0142680P.  
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PR 28-JUL-1999; 99US-0146222P.  
PR 29-OCT-1999; 99US-0162506P.  
PR 30-NOV-1999; 99MO-US028313.  
PR 02-DEC-1999; 99MO-US028565.  
PR 16-DEC-1999; 99MO-US030095.  
PR 30-DEC-1999; 99MO-US031243.  
PR 30-DEC-1999; 99MO-US031274.  
PR 05-JAN-2000; 2000MO-US000219.  
PR 06-JAN-2000; 2000MO-US000277.  
PR 11-FEB-2000; 2000MO-US003565.  
PR 18-FEB-2000; 2000MO-US004341.  
PR 24-FEB-2000; 2000MO-US005004.  
PR 02-MAR-2000; 2000MO-US005841.  
PR 10-MAR-2000; 2000MO-US006319.  
PR 21-MAR-2000; 2000MO-US007532.  
PR 30-MAR-2000; 2000MO-US008439.  
PR 17-MAY-2000; 2000MO-US013705.  
PR 22-MAY-2000; 2000MO-US014042.  
PR 30-MAY-2000; 2000MO-US014941.  
PR 02-JUN-2000; 2000MO-US015264.  
PR 28-JUL-2000; 2000MO-US020710.  
PR 24-AUG-2000; 2000MO-US023378.  
PR 01-DEC-2000; 2000MO-US032678.  
PR 20-DEC-2000; 2000MO-US034956.  
PR 28-FEB-2001; 2001MO-US006520.  
PR 22-MAR-2001; 2001MO-US009552.  
PR 25-MAY-2001; 2001MO-US017092.  
PR 01-JUN-2001; 2001MO-US017800.  
PR 20-JUN-2001; 2001MO-US019682.  
PR 29-JUN-2001; 2001MO-US021066.  
PR 09-JUL-2001; 2001MO-US021735.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
XX (GETH ) GENENTECH INC.  
XX  
XX Ashkenazi AJ, Baker KP, Botstein D, Desnovers L, Eaton DL,  
PI Ferrera N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME,  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,  
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL,  
PI Stewart TA, Tumas D, Williams PM, Wood WI;  
XX  
XX WPI; 2003-902053/82.

XX  
PI New PRO nucleic acid, useful for manufacturing a medicament for  
PT diagnosing or treating tumor or for tissue typing.  
XX  
PS Example 114; SEQ ID NO 564; 457bp; English.  
XX  
CC The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC to an amino acid sequence chosen from 94 fully defined sequences as given  
CC in the specification (including PRO lacking its associated signal  
CC peptide), a PRO extracellular domain with or without its associated signal  
CC peptide). Also included are nucleic acids encoding the PRO proteins  
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
CC comprising the vector and producing PRO, a chimeric molecule comprising  
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
CY 395 GGCCGAGGCCCGCAGGCTC 414  
Db 20 GGCCGAGGCCCTTCAGGCTC 1  
RESULT 356  
ADG60481/c  
ID ADG60481 standard; DNA; 21 BP.  
XX  
AC ADG60481;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE Human PRO 362 Tagman PCR probe.  
XX  
KW Human; sex: PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnery;  
KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
XX  
OS Homo sapiens.  
XX  
XX US2003206915-A1.  
XX  
PD 06-NOV-2003.  
XX  
XX 25-OCT-2001; 2001US-00013916.  
PF  
XX 29-APR-1998; 98US-0083554P.  
PR 08-MAR-1999; 99MO-US005028.  
PR 28-APR-1999; 99US-0131445P.  
PR 25-AUG-1999; 99US-00380138.  
PR 18-FEB-2000; 2000MO-US004341.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
XX (GETH ) GENENTECH INC.  
XX  
XX Ashkenazi AJ, Baker KP, Botstein D, Desnovers L, Eaton DL;  
PI Ferrera N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME,  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,  
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL,  
PI Stewart TA, Tumas D, Williams PM, Wood WI;  
XX  
XX WPI; 2003-901034/82.  
XX  
XX New secreted and transmembrane PRO polypeptides and nucleic acids, useful

PT in gene therapy for creating obesity or diabetes, in chromosome and gene  
XX mapping, and as chromosome markers in tissue typing.  
PS Example 114; SEQ ID NO 564; 520bp; English.  
XX The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC to an amino acid sequence chosen from 94 fully defined sequences as given  
CC in the specification (including PRO lacking its associated signal  
CC peptide), a PRO extracellular domain with or without its associated signal  
CC peptide). Also included are nucleic acids encoding the PRO proteins  
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell  
CC comprising the vector and producing PRO, a chimeric molecule comprising  
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
CC antibody; PRO337 polypeptide is useful for detecting a PRO4993  
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
CC polypeptide, PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
CC causes death of the cell. PRO337 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
CC useful for linking a bioactive molecule to a cell expressing PRO725,  
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
CC polypeptide is useful for modulating at least one biological activity of  
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
CC modulating the biological activity of the cell expressing PRO1559  
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumor growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects,  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
CC mammals. The present sequence is a Tagman PCR probe used investigate PRO  
CC gene amplification in certain tumor cell lines.  
XX  
SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. NO. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 395 GCGCGAAGCCCGCAGGCTC 414  
Db 20 GCGCGAGGCTTCAGGCTC 1  
RESULT 357  
AD161241/c  
ID AD161241 standard; DNA; 21 BP.  
XX  
AC AD161241;  
XX  
DT 22-APR-2004 (first entry)  
XX  
XX Human PRO 362 Tagman PCR probe.  
XX  
XX Human; 86; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
XX ophthalmologic; antiarthritic; osteopathic; antihematic; vulnery;  
XX auditory; tumor growth; retinal disorder; sports-related joint problem;  
XX articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
XX wound healing; hearing loss; probe; in situ hybridisation.  
XX  
XX Homo sapiens.  
XX OS  
XX US2003077700-A1.

XX 24-APR-2003.  
PD 24-OCT-2001; 2001US-00999830.  
XX  
XX 24-OCT-2001; 2001US-00999830.  
XX  
XX 17-OCT-1997; 97US-0062250P.  
PR 03-NOV-1997; 97US-0064249P.  
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PR 21-NOV-1997; 97US-0066364P.  
PR 10-MAR-1998; 98US-0077450P.  
PR 11-MAR-1998; 98US-0077632P.  
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PR 11-MAR-1998; 98US-0077649P.  
PR 12-MAR-1998; 98US-0077791P.  
PR 13-MAR-1998; 98US-0078004P.  
PR 20-MAR-1998; 98US-0078866P.  
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PR 20-MAR-1998; 98US-0078936P.  
PR 20-MAR-1998; 98US-0078939P.  
PR 25-MAR-1998; 98US-0079294P.  
PR 26-MAR-1998; 98US-0079666P.  
PR 26-MAR-1998; 98US-0079663P.  
PR 27-MAR-1998; 98US-0079664P.  
PR 27-MAR-1998; 98US-0079689P.  
PR 27-MAR-1998; 98US-0079728P.  
PR 27-MAR-1998; 98US-0079786P.  
PR 30-MAR-1998; 98US-0079920P.  
PR 30-MAR-1998; 98US-0079923P.  
PR 31-MAR-1998; 98US-0080105P.  
PR 31-MAR-1998; 98US-0080107P.  
PR 31-MAR-1998; 98US-0080165P.  
PR 31-MAR-1998; 98US-0080194P.  
PR 01-APR-1998; 98US-0080327P.  
PR 01-APR-1998; 98US-0080328P.  
PR 01-APR-1998; 98US-0080333P.  
PR 01-APR-1998; 98US-0080334P.  
PR 08-APR-1998; 98US-0081049P.  
PR 08-APR-1998; 98US-0081070P.  
PR 08-APR-1998; 98US-0081071P.  
PR 08-APR-1998; 98US-0081195P.  
PR 09-APR-1998; 98US-0081203P.  
PR 09-APR-1998; 98US-0081229P.  
PR 15-APR-1998; 98US-0081817P.  
PR 15-APR-1998; 98US-0081819P.  
PR 15-APR-1998; 98US-0081838P.  
PR 15-APR-1998; 98US-0081952P.  
PR 15-APR-1998; 98US-0081955P.  
PR 21-APR-1998; 98US-0082568P.  
PR 21-APR-1998; 98US-0082569P.  
PR 22-APR-1998; 98US-0082700P.  
PR 22-APR-1998; 98US-0082704P.  
PR 22-APR-1998; 98US-0082797P.  
PR 22-APR-1998; 98US-0082804P.  
PR 23-APR-1998; 98US-0082796P.  
PR 27-APR-1998; 98US-0083336P.  
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PR 29-APR-1998; 98US-0083554P.  
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PR 29-APR-1998; 98US-0083559P.  
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PR 05-MAY-1998; 98US-0084366P.  
PR 05-MAY-1998; 98US-0084414P.  
PR 06-MAY-1998; 98US-0084441P.  
PR 07-MAY-1998; 98US-0084596P.  
PR 07-MAY-1998; 98US-0084600P.  
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PR 15-MAY-1998; 98US-0085689P.  
PR 15-MAY-1998; 98US-0085697P.  
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PR 28-MAY-1998; 98US-0087098P.  
PR 28-MAY-1998; 98US-0087106P.  
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PR 26-JUN-1998; 98US-0090863P.  
PR 01-JUL-1998; 98US-0091010P.  
PR 30-JUL-1998; 98US-0091359P.  
PR 11-SEP-1998; 98US-0094651P.  
PR 07-OCT-1998; 98US-0100038P.  
PR 20-NOV-1998; 98US-0109304P.  
PR 20-NOV-1998; 98US-0109304P.  
PR 22-DEC-1998; 98US-0113296P.  
PR 23-DEC-1998; 98US-0113621P.  
PR 05-JAN-1999; 99US-01000106.  
PR 08-MAR-1999; 99US-01000106.  
PR 10-MAR-1999; 99US-01000106.  
PR 12-MAR-1999; 99US-0123957P.  
PR 29-MAR-1999; 99US-0126773P.  
PR 21-APR-1999; 99US-0130232P.  
PR 26-APR-1999; 99US-0131022P.  
PR 28-APR-1999; 99US-0131445P.  
PR 14-MAY-1999; 99US-0134287P.  
PR 14-MAY-1999; 99US-0134287P.  
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PR 16-JUN-1999; 99US-0139557P.  
PR 23-JUN-1999; 99US-0141037P.  
PR 07-JUL-1999; 99US-0142680P.  
PR 26-JUL-1999; 99US-0145698P.  
PR 28-JUL-1999; 99US-0146222P.  
PR 29-OCT-1999; 99US-0162506P.  
PR 30-NOV-1999; 99US-0162506P.  
PR 02-DEC-1999; 99US-0162506P.  
PR 02-DEC-1999; 99US-0162506P.  
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PR 30-DEC-1999; 99US-0162506P.  
PR 30-DEC-1999; 99US-0162506P.  
PR 05-JAN-2000; 2000US-0500219.  
PR 06-JAN-2000; 2000US-0500219.  
PR 06-JAN-2000; 2000US-0500219.  
PR 11-FEB-2000; 2000US-0500356.  
PR 18-FEB-2000; 2000US-0500356.  
PR 24-FEB-2000; 2000US-0500356.  
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PR 10-MAR-2000; 2000US-0500356.  
PR 21-MAR-2000; 2000US-0500356.  
PR 30-MAR-2000; 2000US-0500356.  
PR 17-MAY-2000; 2000US-0501375.  
PR 22-MAY-2000; 2000US-0501404.  
PR 30-MAY-2000; 2000US-0501494.  
PR 02-JUN-2000; 2000US-0501526.  
PR 28-JUN-2000; 2000US-0501526.  
PR 01-DEC-2000; 2000US-0502337.  
PR 01-DEC-2000; 2000US-0502337.  
PR 20-DEC-2000; 2000US-0502337.

PR 28-FEB-2001; 2001US-05006520.  
PR 22-MAR-2001; 2001US-05009552.  
PR 25-MAY-2001; 2001US-05017092.  
PR 01-JUN-2001; 2001US-05017800.  
PR 20-JUN-2001; 2001US-05019692.  
PR 29-JUN-2001; 2001US-05021066.  
PR 09-JUL-2001; 2001US-05021735.  
PR 30-JUL-2001; 2001US-05021858.  
PR (GERTH ) GENENTECH INC.  
PI Ashkenazi AJ, Baker KP, Borstein D, Deanyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gertlson MB;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
PI Kijavini J, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
PI Stewart TA, Tumas D, Williams PM, Wood WI;  
PI  
XX WPI; 2003-765401/72.  
XX  
XX  
XX New isolated PRO polypeptide e.g. PRO200, PRO322, PRO540, PRO846 or  
XX PRO617 polypeptide, useful for treating sight loss due to retinitis  
XX pigmentosum by enhancing retinal neural cells survival.  
XX  
XX Example 114; SEQ ID NO 564; 465bp; English.  
XX  
XX The invention relates to an isolated PRO polypeptide (secreted or  
XX transmembrane protein) having at least 80% amino acid sequence identity  
XX to an amino acid sequence chosen from 94 fully defined sequences as given  
XX in the specification (including PRO lacking its associated signal  
XX peptide), a PRO extracellular domain with or without its associated signal  
XX peptide). Also included are nucleic acids encoding the PRO proteins  
XX mentioned above, a vector comprising a PRO nucleic acid, a host cell  
XX comprising the vector and producing PRO, a chimeric molecule comprising  
XX PRO fused to a heterologous amino acid sequence, and an anti-PRO  
XX antibody. PRO337 polypeptide is useful for detecting a PRO4993  
XX polypeptide in a sample suspected of containing PRO4993 polypeptide.  
XX Similarly, PRO4993 polypeptide is useful for detecting PRO337

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3,4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Dy 395 GGCCTGAAGCCCGCAGGTC 414  
Db 20 GGCCTGAAGCCCGCAGGTC 1

RESULT 358  
ACD42897/C  
ID ACD42897 standard; DNA; 21 BP.  
XX  
XX ACD42897;  
XX  
XX 09-SEP-2003 (first entry)  
XX  
XX  
XX Secreted and transmembrane protein associated oligonucleotide #200.  
XX  
XX Human; secreted and transmembrane protein; PRO; virucide; gene therapy;  
XX cell death; growth induction cascade; blood coagulation cascade;  
XX vital infection; ss.  
XX  
XX Homo sapiens.  
XX  
XX US2003050239-A1.  
XX  
XX  
XX 13-MAR-2003.  
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XX  
XX 15-OCT-2001; 2001US-00978191.  
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XX 17-OCT-1997; 97US-0062250P.  
XX 03-NOV-1997; 97US-0064249P.  
XX 13-NOV-1997; 97US-0065311P.  
XX 21-NOV-1997; 97US-0066364P.

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PR 27-MAR-1998; 98US-0079786P.  
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PR 28-JUL-1999; 99US-0146222P.  
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PR 25-AUG-1999; 99US-00380138.  
PR 25-AUG-1999; 99US-00380142.  
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PR 02-DEC-1999; 99WO-US028565.  
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PR 06-JAN-2000; 2000WO-US000376.  
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PR 10-MAR-2000; 2000WO-US006319.  
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PR 02-JUN-2000; 2000WO-US015264.  
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PR 08-NOV-2000; 2000US-00709238.  
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PR 01-DEC-2000; 2000WO-US032678.  
PR 20-DEC-2000; 2000US-00747259.  
PR 20-DEC-2000; 2000WO-US034956.  
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PR 22-MAR-2001; 2001US-00816920.  
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PR 25-MAY-2001; 2001WO-US017092.  
PR 01-JUN-2001; 2001US-00872035.  
PR 01-JUN-2001; 2001WO-US017400.  
PR 05-JUN-2001; 2001US-00874503.  
PR 14-JUN-2001; 2001US-00882636.  
PR 19-JUN-2001; 2001US-00886342.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
XX (GENTH ) GENENTECH INC.  
XX  
XX Ashkenazi AJ, Baker KP, Borstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 395 GCGCGAGGCGCGGAGGCTC 414  
DB 20 GCGCGAGGCGCTTAGGCTC 1

RESULT 359  
ADK01314  
ID ADK01314 standard; DNA; 21 BP.

XX ADK01314;

DT 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #34.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
KM blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS ) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression  
PT patterns and screening active agents, uses capture agent with variable  
XX and constant regions.

PS Example; Page 5; Bpp; German.

XX This invention describes a novel method for sorting single-stranded  
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture  
CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
CC least once in each nucleic acid and a 3'-variable, discriminatory region  
CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acid in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01314 represent  
CC capture probes used in the method of the invention.  
XX

SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1302 TCTATTTTTTTTATTTTCAG 1321  
DB 2 TTTTTTTTTTTTTCAG 21

RESULT 360  
ADK01314/c

ID ADK01314 standard; DNA; 21 BP.

XX ADK01314;

AC 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #34.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;  
KM blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS ) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX



PT Sorting single-stranded nucleic acid, useful for analyzing expression  
PT patterns and screening active agents, uses capture agent with variable  
PT and constant regions.

XX Example; Page 5; 8pp; German.

PS This invention describes a novel method for sorting single-stranded  
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture  
CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
CC least once in each nucleic acid and a 3'-variable, discriminatory region  
CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acids in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.

SO Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 3.4e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1518 TTTAAAAAAGTAAAA 1537

DB 20 TGAATAAAAAAAAAA 1

RESULT 361

ADK01313/C

ID ADK01313 standard; DNA; 21 BP.

AC ADK01313;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #33.

KW 88; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

DE10208794-A1.

04-SEP-2003.

28-FEB-2002; 2002DE-01008794.

28-FEB-2002; 2002DE-01008794.

(DEGS ) DEGUSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;  
XX DR WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression  
PT patterns and screening active agents, uses capture agent with variable  
PT and constant regions.

XX Example; Page 5; 8pp; German.

PS This invention describes a novel method for sorting single-stranded  
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then  
CC reading out, where the nucleic acids are selectively bound using capture  
CC agents that are (a) immobilised on the surface of a solid matrix and (b)  
CC comprise variable and non-variable regions. The capture oligonucleotides  
CC have a 5'-invariable anchor region, the complement of which is present at  
CC least once in each nucleic acid and a 3'-variable, discriminatory region  
CC that comprises all possible combinations of up to 10 nucleotides to allow  
CC binding of particular sorts of single stranded nucleic acids. The capture  
CC agents are particularly locked nucleic acids (LNA) and the anchor region  
CC comprises a sequence of 10-50, particularly 15-25, T residues. The  
CC capture oligonucleotides are biotinylated and immobilised on a surface by  
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,  
CC metal, resin, gel, crystalline material and/or membrane, having semi-  
CC conducting properties and especially in the form of a chip. Its surface  
CC is particularly a layer of (bio)molecular filaments and binding of single  
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,  
CC physical, stimulated by an electrical field or through a molecular sieve.  
CC The method is used (i) for analysis of patterns, especially in mucosal,  
CC hair root, blood, nerve or germ cells and (ii) for determining the  
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food  
CC additives or supplements, especially minerals, trace elements, organic  
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and  
CC mixtures. The method provides rapid, inexpensive and reproducible  
CC representation of differences in pools of nucleic acids from cells. It  
CC allows imaging of the complete pattern of all nucleic acids in a cell, and  
CC can detect very small differences in the nucleic acid pool. Since the  
CC method is based on comparison of nucleic acid pools, not individual  
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent  
CC capture probes used in the method of the invention.

SO Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 3.4e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1518 TTTAAAAAAGTAAAA 1537

DB 21 TTGAAAAAAAAA 2

RESULT 362

ADK01333/C

ID ADK01333 standard; DNA; 21 BP.

AC ADK01333;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #53.

KW 88; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

DE10208794-A1.

04-SEP-2003.

28-FEB-2002; 2002DE-01008794.

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PR 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acids in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1518 TTAATAAAAAAAAAAGTAAAA 1537
Db 21 TCAAAAAAAAAAAAAAAAAAAAA 2
XX
RESULT 363
ADK01297/c
ID ADK01297 standard; DNA; 21 BP.
XX
XX ADK01297;
AC
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #17.
XX
KM ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KM blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX DE10208794-A1.
XX
XX
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PD 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acids in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1518 TTAATAAAAAAAAAAGTAAAA 1537
Db 21 TCAAAAAAAAAAAAAAAAAAAAA 2
XX
RESULT 364
ADK01337/c
ID ADK01337 standard; DNA; 21 BP.
XX
XX ADK01337;
AC
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #57.
XX
KM ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KM blood; nerve; germ cell; food additive; food supplement.
XX
XX
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OS Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 6; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1518 TTTAAAAAAGTAAAA 1537
XX |||||
XX 21 TCAAAAAAAAAAAAAA 2
XX
XX RESULT 365
XX ADK01299/C
XX ID ADK01299 standard; DNA; 21 BP.
XX
XX AC ADK01299;
XX
XX XX 06-MAY-2004 (first entry)
XX
XX XX Rat DNA microarray capture oligonucleotide #19.

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XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1518 TTTAAAAAAGTAAAA 1537
XX |||||
XX 20 TCAAAAAAAAAAAAAA 1
XX
XX RESULT 366
XX ADK01315/C
XX ID ADK01315 standard; DNA; 21 BP.
XX
XX AC ADK01315;

```

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XX 06-MAY-2004 (first entry)
DT Rat DNA microarray capture oligonucleotide #35.
XX
XX
XX ss: hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
ADK01298/C
ID ADK01298 standard; DNA; 21 BP.
XX
XX ADK01298;
AC
XX
XX 06-MAY-2004 (first entry)
DT
XX
XX Rat DNA microarray capture oligonucleotide #18.
XX
XX ss: hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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DB 20 TCAAAAAAAAAAAAAA 1

RESULT 368

ADJ99088/c

ID ADJ99088 standard; DNA; 21 BP.

XX

AC ADJ99088;

XX

DT 06-MAY-2004 (first entry)

XX

DE Human cyp2d6 PCR primer cyp2d6\_3/4-f.

XX

KW detection; probe; microarray; hybridisation; cyp2d6; human;

KW cytochrome-P450; ss; PCR; primer.

XX

OS Homo sapiens.

XX

PH Key

FT modified\_base 1 Location/Qualifiers

FT /+tag= a

FT /mod\_base= OTHER

FT /note= "5'-NH2 modification"

XX

PN DE10201463-A1.

XX

PD 24-JUL-2003.

XX

PF 16-JAN-2002; 2002DE-01001463.

XX

PR 16-JAN-2002; 2002DE-01001463.

XX

PA (CLON-) CLONDIAG CHIP TECHNOLOGIES GMBH.

XX

PI Schulz T, Ermantraut E, Ehrlich R, Moebius KP, Wagner G;

PI Fischer J, Ellinger T;

XX

DR WPI; 2003-698569/67.

XX

PT Reaction vessel, useful for detecting a specific interaction between a

PT target and probe, e.g. in medical tests, comprises at its base a carrier

PT for immobilized probes.

XX

PS Example 2; Page 21; 38pp; German.

XX

CC This invention describes a novel reaction vessel for detecting specific

CC interactions between molecular targets and probe molecules comprising a

CC laboratory reaction vessel (tube) that has, on its base, a carrier on

CC which probe molecules are immobilised in predetermined regions. The base

CC includes an opening for receiving the carrier and is optically

CC transparent in the region of the detection surface. The carrier is made

CC of glass and/or silicon and the vessel is made of glass (optionally

CC coated with plastics), glass ceramic, plastics or metal. Probes are

CC present in a substance library, especially proteins (e.g. antibodies,

CC receptors and/or membrane proteins), peptides (receptor ligands,

CC pharmaceutically active peptides and/or hormones) or nucleic acids (DNA

CC and/or RNA). The detection system is a camera, especially a charge-

CC coupled device or CMOS camera, optionally fitted with an optical read-out

CC system. The device may include a light source that ensures homogeneous

CC illumination of the carrier, especially an array of diffusely irradiating

CC sources that are superimposed. These sources are lasers, LED, plane

CC radiators or high-pressure lamps and the cover of the reaction vessel is

CC structured to ensure homogeneous illumination. The system preferably also

CC contains optical filters and optionally a filter exchanger, a

CC 'semipermeable' mirror between light sources and the carrier, a

CC temperature control unit and a computer that collects signal intensities

CC from the detector and converts them to an analogue image. The reaction

CC vessel is in direct contact with the detector and many reaction vessels

CC are arranged for sequential examination. Target molecules are contacted

CC with probes and any interaction detected, e.g. from conventional labels

CC but most preferably the interaction results in precipitation on the array

CC of probes and the time progression of precipitation is detected as a

CC signal intensity. Particularly a soluble precursor is converted into a

CC metallic precipitate, particularly reduction of a silver salt (nitrate,

CC lactate, acetate or tartrate) by formaldehyde or hydroquinone.

CC Preparation may occur in the presence of a metal (especially gold)

CC clusters or colloidal particles, coupled to the target, and precipitation

CC is detected by reflection, absorption or scattering of a light beam

CC passed through the precipitate. The new vessel is used as a component in

CC a device for performing microarray tests, i.e. interaction of a target

CC with protein, peptide or nucleic acid probes, e.g. for biomedical,

CC including hybridisation or immunological, tests. The reaction vessel is

CC of simple construction, is easy and inexpensive to make and is compatible

CC with other laboratory apparatus (e.g. bench centrifuges and pipettes).

CC Micro-array tests can be performed in a single vessel, reducing the risk

CC of contamination and only relatively simple detectors are required.

CC ADJ99048-ADJ99087 represent probes used to detect the cyp2d6 gene which

CC encodes human cytochrome-P450 and are used to illustrate the method of

CC the invention.

XX

SQ Sequence 21 BP; 3 A; 11 C; 5 G; 2 T; 0 U; 0 Other;

XX

Query Match 1.1%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 3.4e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 596 GGCGCGGCGCGCGCGCGTG 615

DB 20 GGACGGGCGACGTGCGCGTG 1

XX

RESULT 369

ADJ48898/c

ID ADJ48898 standard; DNA; 21 BP.

XX

AC ADJ48898;

XX

DT 29-JAN-2004 (first entry)

XX

DE Human PRO 362 Taqman PCR probe.

XX

KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;

KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnary;

KW auditory; tumour growth; retinal disorder; sports-related joint problem;

KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;

KW wound healing; hearing loss; probe; in situ hybridisation.

XX

OS Homo sapiens.

XX

PN US2003104536-A1.

XX

PD 05-JUN-2003.

XX

PF 19-OCT-2001; 2001US-00166709.

XX

PR 07-OCT-1998; 98WO-US021141.

PR 20-NOV-1998; 98WO-US024855.

PR 05-JAN-1999; 99WO-US000106.

PR 08-MAR-1999; 99WO-US005028.

PR 10-MAR-1999; 99WO-US005190.

PR 14-MAY-1999; 99WO-US010733.

PR 02-JUN-1999; 99WO-US012252.

PR 30-NOV-1999; 99WO-US028313.

PR 02-DEC-1999; 99WO-US028551.

PR 02-DEC-1999; 99WO-US028565.

PR 16-DEC-1999; 99WO-US030095.

PR 30-DEC-1999; 99WO-US031243.

PR 30-DEC-1999; 99WO-US031274.

PR 05-JAN-2000; 2000WO-US000219.

PR 06-JAN-2000; 2000WO-US000276.

PR 06-JAN-2000; 2000WO-US000375.

PR 11-FEB-2000; 2000WO-US003565.

PR 18-FEB-2000; 2000WO-US004341.

PR 24-FEB-2000; 2000WO-US005004.

PR 02-MAR-2000; 2000WO-US005841.

PR 10-MAR-2000; 2000WO-US006319.



PR 15-APR-1998; 98US-0081819P.  
PR 15-APR-1998; 98US-0081838P.  
PR 15-APR-1998; 98US-0081952P.  
PR 15-APR-1998; 98US-0081955P.  
PR 21-APR-1998; 98US-0082568P.  
PR 21-APR-1998; 98US-0082569P.  
PR 22-APR-1998; 98US-0082700P.  
PR 22-APR-1998; 98US-0082704P.  
PR 22-APR-1998; 98US-0082797P.  
PR 22-APR-1998; 98US-0082804P.  
PR 23-APR-1998; 98US-0082796P.  
PR 27-APR-1998; 98US-0083336P.  
PR 28-APR-1998; 98US-0083322P.  
PR 29-APR-1998; 98US-0083392P.  
PR 29-APR-1998; 98US-0083495P.  
PR 29-APR-1998; 98US-0083496P.  
PR 29-APR-1998; 98US-0083499P.  
PR 29-APR-1998; 98US-0083500P.  
PR 29-APR-1998; 98US-0083545P.  
PR 29-APR-1998; 98US-0083554P.  
PR 29-APR-1998; 98US-0083558P.  
PR 29-APR-1998; 98US-0083559P.  
PR 30-APR-1998; 98US-0083742P.  
PR 05-MAY-1998; 98US-0084366P.  
PR 06-MAY-1998; 98US-0084414P.  
PR 06-MAY-1998; 98US-0084441P.  
PR 07-MAY-1998; 98US-0084598P.  
PR 07-MAY-1998; 98US-0084600P.  
PR 07-MAY-1998; 98US-0084627P.  
PR 07-MAY-1998; 98US-0084637P.  
PR 07-MAY-1998; 98US-0084639P.  
PR 07-MAY-1998; 98US-0084640P.  
PR 07-MAY-1998; 98US-0084643P.  
PR 13-MAY-1998; 98US-0085323P.  
PR 13-MAY-1998; 98US-0085338P.  
PR 15-MAY-1998; 98US-0085533P.  
PR 15-MAY-1998; 98US-0085573P.  
PR 15-MAY-1998; 98US-0085579P.  
PR 15-MAY-1998; 98US-0085580P.  
PR 15-MAY-1998; 98US-0085582P.  
PR 15-MAY-1998; 98US-0085689P.  
PR 15-MAY-1998; 98US-0085697P.  
PR 15-MAY-1998; 98US-0085700P.  
PR 15-MAY-1998; 98US-0085704P.  
PR 18-MAY-1998; 98US-0086023P.  
PR 22-MAY-1998; 98US-0086392P.  
PR 22-MAY-1998; 98US-0086414P.  
PR 22-MAY-1998; 98US-0086430P.  
PR 22-MAY-1998; 98US-0086486P.  
PR 28-MAY-1998; 98US-0087098P.  
PR 28-MAY-1998; 98US-0087106P.  
PR 28-MAY-1998; 98US-0087208P.  
PR 26-JUN-1998; 98US-0090863P.  
PR 26-JUN-1998; 98US-0091010P.  
PR 01-JUL-1998; 98US-0091359P.  
PR 30-JUL-1998; 98US-0094651P.  
PR 11-SEP-1998; 98US-0100038P.  
PR 07-OCT-1998; 98WO-US021141.  
PR 20-NOV-1998; 98US-0109304P.  
PR 20-NOV-1998; 98WO-US024855.  
PR 22-DEC-1998; 98US-0113296P.  
PR 23-DEC-1998; 98US-0113621P.  
PR 03-JAN-1999; 98WO-US000106.  
PR 08-MAR-1999; 99WO-US005028.  
PR 10-MAR-1999; 99WO-US005190.  
PR 12-MAR-1999; 99US-0123957P.  
PR 29-MAR-1999; 99US-0126773P.  
PR 21-APR-1999; 99US-0130232P.  
PR 26-APR-1999; 99US-0131022P.  
PR 28-APR-1999; 99US-0131445P.  
PR 14-MAY-1999; 99US-0134287P.  
PR 14-MAY-1999; 99WO-US010733.  
PR 02-JUN-1999; 99WO-US012252.

PR 16-JUN-1999; 99US-0139557P.  
PR 23-JUN-1999; 99US-0141037P.  
PR 07-JUL-1999; 99US-0142680P.  
PR 26-JUL-1999; 99US-0145698P.  
PR 28-JUL-1999; 99US-0146222P.  
PR 29-OCT-1999; 99US-0162506P.  
PR 30-NOV-1999; 99WO-US028313.  
PR 02-DEC-1999; 99WO-US028551.  
PR 02-DEC-1999; 99WO-US028565.  
PR 16-DEC-1999; 99WO-US030095.  
PR 30-DEC-1999; 99WO-US031243.  
PR 30-DEC-1999; 99WO-US031274.  
PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000277.  
PR 06-JAN-2000; 2000WO-US000376.  
PR 11-FEB-2000; 2000WO-US003565.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 02-MAR-2000; 2000WO-US005841.  
PR 10-MAR-2000; 2000WO-US006319.  
PR 21-MAR-2000; 2000WO-US007532.  
PR 30-MAR-2000; 2000WO-US008439.  
PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014942.  
PR 30-MAY-2000; 2000WO-US015264.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 28-JUL-2000; 2000WO-US020710.  
PR 24-AUG-2000; 2000WO-US023328.  
PR 01-DEC-2000; 2000WO-US032678.  
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PR 22-MAR-2001; 2001WO-US009552.  
PR 25-MAY-2001; 2001WO-US017092.  
PR 01-JUN-2001; 2001WO-US017800.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
PA (ASHK/) ASHKENAZI A J.  
PA (BAKE/) BAKER K P.  
PA (BOTS/) BOTSTEIN D.  
PA (DESN/) DESNOYERS L.  
PA (EATO/) EATON D L.  
PA (FERR/) FERRARA N.  
PA (FLIV/) FLIVAROFF E.  
PA (FONG/) FONG S.  
PA (GAOW/) GAO W.  
PA (GERB/) GERBER H.  
PA (GERR/) GERRITSEN M E.  
PA (GODO/) GODDARD A.  
PA (GODO/) GODDARD P J.  
PA (GIRM/) GIRMALDI J C.  
PA (GURN/) GURNEY A L.  
PA (HILL/) HILLAN K J.  
PA (KLJA/) KLJAVIN I J.  
PA (KLOS/) KLOS S S.  
PA (NAPI/) NAPIER M A.  
PA (PANU/) PAN J.  
PA (PAONI/) PAONI N F.  
PA (ROYM/) ROY M A.  
PA (SHEL/) SHELTON D L.  
PA (STEM/) STEWART T A.  
PA (TUMA/) TUMAS D.  
PA (WILL/) WILLIAMS P M.  
PA (WOOD/) WOOD W I.  
XX

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Gy 395 GGCGAAGGCCCGCAGGATC 414

Db 20 GGCGGAGGCGCTTCAGGCTC 1  
RESULT 371  
ADf61639/C  
ID ADf61639 standard; DNA; 21 BP.  
XX ADF61639;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE Human PRO 362 Taqman PCR probe.  
XX  
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosstatic;  
KW ophthalmologic; antiarthritic; osteopathic; antirheumatic; vulnery;  
KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
XX  
OS Homo sapiens.  
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KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; probe; in situ hybridisation.
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XX PD 30-OCT-2003.
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XX PF 24-OCT-2001; 2001US-00017085.
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XX 17-OCT-1997; 97US-0062250P.
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XX 22-APR-1998; 98US-0082704P.
XX 22-APR-1998; 98US-0082797P.
XX 22-APR-1998; 98US-0082804P.
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XX 27-APR-1998; 98US-0083336P.
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XX 07-OCT-1998; 98WO-US021141.
XX 20-NOV-1998; 98WO-US024855.
XX 05-JAN-1999; 99WO-US000106.
XX 08-MAR-1999; 99WO-US005028.
XX 10-MAR-1999; 99WO-US005190.
XX 14-MAY-1999; 99WO-US010733.
XX 30-NOV-1999; 99WO-US012252.
XX 02-DEC-1999; 99WO-US028313.
XX 02-DEC-1999; 99WO-US028551.
XX 16-DEC-1999; 99WO-US028565.
XX 30-DEC-1999; 99WO-US030095.
XX 30-DEC-1999; 99WO-US031243.
XX 05-JAN-2000; 2000WO-US000219.
XX 06-JAN-2000; 2000WO-US000277.
XX 11-FEB-2000; 2000WO-US003565.
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PR 18-FEB-2000; 2000MO-US004341.  
 PR 24-FEB-2000; 2000MO-US005004.  
 PR 02-MAR-2000; 2000MO-US005841.  
 PR 10-MAR-2000; 2000MO-US006319.  
 PR 21-MAR-2000; 2000MO-US007532.  
 PR 30-MAR-2000; 2000MO-US008439.  
 PR 17-MAY-2000; 2000MO-US013705.  
 PR 22-MAY-2000; 2000MO-US014042.  
 PR 30-MAY-2000; 2000MO-US014941.  
 PR 02-JUN-2000; 2000MO-US015254.  
 PR 28-JUL-2000; 2000MO-US020710.  
 PR 24-AUG-2000; 2000MO-US023328.  
 PR 01-DEC-2000; 2000MO-US032678.  
 PR 20-DEC-2000; 2000MO-US034956.  
 PR 28-FEB-2001; 2001MO-US006520.  
 PR 22-MAR-2001; 2001MO-US009552.  
 PR 25-MAY-2001; 2001MO-US017092.  
 PR 01-JUN-2001; 2001MO-US017800.  
 PR 20-JUN-2001; 2001MO-US019692.  
 PR 29-JUN-2001; 2001MO-US021066.  
 PR 09-JUL-2001; 2001MO-US021735.  
 PR 30-JUL-2001; 2001US-00918585.  
 XX  
 XX (GETH ) GENENTECH INC.  
 XX  
 PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Baon DL;  
 PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;  
 PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
 PI Klyavin ID, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
 PI Stewart TA, Tumas D, Williams PM, Wood WI;  
 XX  
 XX MPI; 2004-041494/04.  
 XX  
 PT New PRO polypeptide useful for treating peripheral neuropathy, or  
 PT neuropathies associated with systemic disease such as post-polio syndrome  
 PT or acquired immunodeficiency syndrome-associated syndrome.  
 XX  
 PS Example 114; SEQ ID NO 564; 459bp; English.  
 XX  
 CC The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 94 fully defined sequences as given  
 CC in the specification (including PRO lacking its associated signal  
 CC peptide, a PRO extracellular domain with or without its associated signal  
 CC peptide). Also included are nucleic acids encoding the PRO proteins  
 CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
 CC comprising the vector and producing PRO, a chimeric molecule comprising  
 CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
 CC antibody. PRO337 polypeptide is useful for detecting a PRO493  
 CC polypeptide in a sample suspected of containing PRO493 polypeptide.  
 CC Similarly, PRO493 polypeptide is useful for detecting PRO337  
 CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
 CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
 CC PRO725, PRO700 or PRO739. PRO493 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
 CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
 CC causes death of the cell. PRO337 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO493 polypeptide; PRO725,  
 CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
 CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
 CC useful for linking a bioactive molecule to a cell expressing PRO725,  
 CC PRO700 or PRO739 polypeptide. PRO493 polypeptide or anti-PRO337  
 CC polypeptide is useful for modulating at least one biological activity of  
 CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
 CC polypeptide or anti-PRO493 polypeptide is useful for modulating the  
 CC biological activity of the cell expressing PRO493 polypeptide; PRO725,  
 CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
 CC modulating the biological activity of the cell expressing PRO1559  
 CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
 CC PRO739 polypeptide is useful for modulating the biological activity of  
 CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
 CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
 CC sports-related joint problems, articular cartilage defects,

CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
 CC mammals. The present sequence is a Tagman PCR probe used investigate PRO  
 CC gene amplification in certain tumour cell lines.  
 XX  
 SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 OY 395 GCGCGAGCGCCGAGGCTC 414  
 DB 20 GCGCGAGCGCCCTCAGGCTC 1  
 RESULT 375  
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 ID ADF40955 standard; DNA, 21 BP.  
 XX  
 AC ADF40955;  
 XX  
 DT 12-FEB-2004 (first entry)  
 XX  
 DE Human PRO 362 Tagman PCR probe.  
 XX  
 KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
 KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnery;  
 KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
 KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
 KW wound healing; hearing loss; probe; in situ hybridisation.  
 XX  
 OS Homo sapiens.  
 XX  
 PM US2003199021-A1.  
 XX  
 PD 23-OCT-2003.  
 XX  
 PF 25-OCT-2001; 2001US-00013924.  
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 PR 30-JUL-2001; 2001US-00918585.  
 XX  
 PA (GETH ) GENENTECH INC.  
 XX  
 PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Baon DL;  
 PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;  
 PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
 PI Klyavin ID, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
 PI Stewart TA, Tumas D, Williams PM, Wood WI;  
 XX  
 XX MPI; 2004-041351/04.  
 DR  
 XX  
 PT New nucleic acid encoding a secreted and transmembrane polypeptide,  
 PT useful for treating e.g. lung or breast tumours, osteoarthritis,  
 PT rheumatoid arthritis, obesity, diabetes, hyperinsulinemia,  
 PT hypoinulinemia or wounds.  
 XX  
 PS Example 114; SEQ ID NO 564; 461bp; English.  
 XX  
 CC The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 94 fully defined sequences as given  
 CC in the specification (including PRO lacking its associated signal  
 CC peptide, a PRO extracellular domain with or without its associated signal  
 CC peptide). Also included are nucleic acids encoding the PRO proteins  
 CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
 CC comprising the vector and producing PRO, a chimeric molecule comprising  
 CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
 CC antibody. PRO337 polypeptide is useful for detecting a PRO493  
 CC polypeptide in a sample suspected of containing PRO493 polypeptide.  
 CC Similarly, PRO493 polypeptide is useful for detecting PRO337  
 CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
 CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
 CC PRO725, PRO700 or PRO739. PRO493 polypeptide is useful for linking a

CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
CC causes death of the cell. PRO337 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
CC useful for linking a bioactive molecule to a cell expressing PRO725,  
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
CC polypeptide is useful for modulating at least one biological activity of  
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
CC modulating the biological activity of the cell expressing PRO1559  
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects,  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
CC mammals. The present sequence is a Tagman PCR probe used investigate PRO  
CC gene amplification in certain tumour cell lines.

XX Sequence 21 BP, 3 A, 9 C, 6 G, 3 T, 0 U, 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 3.4e+02;

Matches 17, Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 395 GGCGGAGGCGCGGAGGCTC 414

Db 20 GGCGGAGGCGCTTCAGGCTC 1

RESULT 376

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ID ADF23899 standard; DNA, 21 BP.

XX ADF23899;

DT 12-FEB-2004 (first entry)

DE Human PRO 362 Tagman PCR probe.

XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
XX ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnery;

KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;

KW wound healing; hearing loss; probe; in situ hybridisation.

XX Homo sapiens.

PN US2003203402-A1.

XX 30-OCT-2003.

PF 24-OCT-2001; 2001US-00017084.

XX 17-OCT-1997; 97US-0062250P.

PR 03-NOV-1997; 97US-0062249P.

PR 13-NOV-1997; 97US-006311P.

PR 21-NOV-1997; 97US-0065364P.

PR 10-MAR-1998; 98US-0077450P.

PR 11-MAR-1998; 98US-0077632P.

PR 11-MAR-1998; 98US-0077641P.

PR 11-MAR-1998; 98US-0077649P.

PR 12-MAR-1998; 98US-0077791P.

PR 13-MAR-1998; 98US-0078004P.

PR 17-MAR-1998; 98US-00040220.

PR 20-MAR-1998; 98US-0078886P.

PR 20-MAR-1998; 98US-0078910P.

PR 20-MAR-1998; 98US-0078936P.

PR 20-MAR-1998; 98US-0078939P.

PR 25-MAR-1998; 98US-0079294P.

PR 26-MAR-1998; 98US-0079656P.

PR 27-MAR-1998; 98US-0079663P.

PR 27-MAR-1998; 98US-0079664P.

PR 27-MAR-1998; 98US-0079689P.

PR 27-MAR-1998; 98US-0079728P.

PR 27-MAR-1998; 98US-0079786P.

PR 30-MAR-1998; 98US-0079920P.

PR 30-MAR-1998; 98US-0079923P.

PR 31-MAR-1998; 98US-0080105P.

PR 31-MAR-1998; 98US-0080107P.

PR 31-MAR-1998; 98US-0080165P.

PR 31-MAR-1998; 98US-0080194P.

PR 01-APR-1998; 98US-0080327P.

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PR 08-APR-1998; 98US-0081070P.

PR 08-APR-1998; 98US-0081071P.

PR 09-APR-1998; 98US-0081195P.

PR 09-APR-1998; 98US-0081203P.

PR 09-APR-1998; 98US-0081229P.

PR 15-APR-1998; 98US-0081817P.

PR 15-APR-1998; 98US-0081819P.

PR 15-APR-1998; 98US-0081838P.

PR 15-APR-1998; 98US-0081952P.

PR 15-APR-1998; 98US-0081955P.

PR 21-APR-1998; 98US-0082568P.

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PR 22-APR-1998; 98US-0082700P.

PR 22-APR-1998; 98US-0082704P.

PR 22-APR-1998; 98US-0082797P.

PR 22-APR-1998; 98US-0082804P.

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PR	10-MAY-2001;	2001US-00854208.	
PR	10-MAY-2001;	2001US-00854280.	
PR	25-MAY-2001;	2001WO-US017092.	
PR	01-JUN-2001;	2001US-00872035.	
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PR	05-JUN-2001;	2001US-00874503.	
PR	14-JUN-2001;	2001US-00882656.	
PR	19-JUN-2001;	2001US-00886342.	
PR	20-JUN-2001;	2001WO-US019692.	
PR	29-JUN-2001;	2001WO-US021066.	
PR	09-JUL-2001;	2001WO-US021735.	
PR	30-JUL-2001;	2001US-00918585.	
XX			
PA	(GETH )	GENENTECH INC.	
XX			
PI	Ashkenazi AJ, Baker KP, Botstein D, Desnovers L, Eaton DL;		
	Query Match	1.1%;	Score 15.2; DB 1;
	Best Local Similarity	85.0%;	Pred. No.3.4e+02;
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Db	20	GGCCGAGGCCCTTCAGGCTC	1
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AC	ADf33882;		
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DT	12-FEB-2004	(first entry)	
XX			
DE	Human PRO 362 Tagman PCR probe.		
XX			
KW	Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;		
KW	ophthalmological; antiarthritic; osteopathic; anti-rheumatic; vulnery;		
KW	auditory; tumour growth; retinal disorder; sports-related joint problem;		
KW	articular cartilage defects; osteoarthritis; rheumatoid arthritis;		
KW	wound healing; hearing loss; probe; in situ hybridisation.		
XX			
OS	Homo sapiens.		
XX			
PN	US2003194780-A1.		
XX			
PD	16-OCT-2003.		
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PF	19-OCT-2001; 2001US-00164829.		
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PR	29-APR-1998;	98US-0083392P.	
PR	07-OCT-1998;	98WO-US021141.	
PR	20-NOV-1998;	98WO-US024855.	
PR	05-JAN-1999;	99WO-US000106.	
PR	08-MAR-1999;	99WO-US005028.	
PR	10-MAR-1999;	99WO-US005190.	
PR	15-APR-1999;	99WO-US008313.	
PR	14-MAY-1999;	99WO-US010733.	
PR	02-JUN-1999;	99WO-US012252.	
PR	25-AUG-1999;	99US-00380138.	
PR	30-NOV-1999;	99WO-US028313.	
PR	02-DEC-1999;	99WO-US028551.	
PR	02-DEC-1999;	99WO-US028555.	
PR	16-DEC-1999;	99WO-US030095.	
PR	30-DEC-1999;	99WO-US031243.	
PR	05-JAN-2000;	2000WO-US000219.	
PR	06-JAN-2000;	2000WO-US000277.	
PR	06-JAN-2000;	2000WO-US000376.	
PR	11-FEB-2000;	2000WO-US003565.	
PR	18-FEB-2000;	2000WO-US004341.	
PR	24-FEB-2000;	2000WO-US005004.	

PR 02-MAR-2000; 2000MO-US005841.  
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PR 21-MAR-2000; 2000MO-US007532.  
PR 30-MAR-2000; 2000MO-US008439.  
PR 17-MAY-2000; 2000MO-US013705.  
PR 22-MAY-2000; 2000MO-US014042.  
PR 30-MAY-2000; 2000MO-US014941.  
PR 02-JUN-2000; 2000MO-US015264.  
PR 28-JUL-2000; 2000MO-US020710.  
PR 24-AUG-2000; 2000MO-US023328.  
PR 01-DEC-2000; 2000MO-US032678.  
PR 20-DEC-2000; 2000MO-US034856.  
PR 28-FEB-2001; 2001MO-US006520.  
PR 22-MAR-2001; 2001MO-US009552.  
PR 25-MAY-2001; 2001MO-US017092.  
PR 01-JUN-2001; 2001MO-US017800.  
PR 20-JUN-2001; 2001MO-US019692.  
PR 29-JUN-2001; 2001MO-US021066.  
PR 09-JUL-2001; 2001MO-US021735.  
PR 30-JUL-2001; 2001US-00918585.

XX (GETH ) GENENTECH INC.

PI Ashkenazi AJ, Baker KP, Boctstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gether H, Gerritsen ME;  
PI Goddard A, Godowski P, Grimaldi JC, Gunney AL, Hillan KJ,  
PI Kijavari J, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
PI Stewart TA, Tumas D, Williams PM, Wood WI;  
XX  
XX WPI; 2004-021078/02.

PT New secreted and transmembrane nucleic acid useful for treating  
PT inflammation, organ failure, atherosclerosis, cardiac injury,  
PT infertility, birth defects, premature aging, acquired immunodeficiency  
PT syndrome, or cancer.

PS Example 114; SEQ ID NO 564; 463bp; English.

XX  
CC The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC to an amino acid sequence chosen from 94 fully defined sequences as given  
CC in the specification (including PRO lacking its associated signal  
CC peptide, a PRO extracellular domain with or without its associated signal  
CC peptide). Also included are nucleic acids encoding the PRO proteins  
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
CC comprising the vector and producing PRO, a chimeric molecule comprising  
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
CC causes death of the cell. PRO337 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO4993 polypeptide. PRO725,  
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
CC useful for linking a bioactive molecule to a cell expressing PRO725,  
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
CC polypeptide is useful for modulating at least one biological activity of  
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
CC biological activity of the cell expressing PRO4993 polypeptide. PRO725,  
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
CC modulating the biological activity of the cell expressing PRO1559  
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects, and hearing loss in  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in

CC mammals. The present sequence is a Tagman PCR probe used investigate PRO  
CC gene amplification in certain tumour cell lines.

XX Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;

XX Query Match 1.1%; Score 15.2; DB 1; Length 21;

XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;

XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

XX 395 GGCCGAGGCCCGCAGGTC 414

Db 20 GGCCGAGGCCCTTCAGGTC 1

RESULT 378

ADP27349/c

ID ADP27349 standard; DNA; 21 BP.

XX ADP27349;

XX 12-FEB-2004 (first entry)

XX Human PRO 362 Tagman PCR probe.

XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
XX optthalmological; antiarthritic; osteopachic; antirheumatic; vulnary;  
XX auditory; tumour growth; retinal disorder; sports-related joint problem;  
XX articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
XX wound healing; hearing loss; probe; in situ hybridisation.

XX Homo sapiens.

XX US2003199435-A1.

XX 23-OCT-2003.

XX 16-OCT-2001; 2001US-00978544.

XX 17-OCT-1997; 97US-0062250P.  
XX 03-NOV-1997; 97US-0064249P.  
XX 13-NOV-1997; 97US-0065311P.  
XX 21-NOV-1997; 97US-0066364P.  
XX 10-MAR-1998; 98US-0077450P.  
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XX 20-MAR-1998; 98US-0078939P.  
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XX 31-MAR-1998; 98US-0080107P.  
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XX 31-MAR-1998; 98US-0080194P.  
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XX 01-APR-1998; 98US-0080328P.  
XX 01-APR-1998; 98US-0080333P.  
XX 01-APR-1998; 98US-0080344P.  
XX 08-APR-1998; 98US-0081049P.  
XX 08-APR-1998; 98US-0081070P.  
XX 08-APR-1998; 98US-0081071P.  
XX 09-APR-1998; 98US-0081195P.



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PR 15-MAY-1998; 98US-0085573P.
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PR 26-JUN-1998; 98US-0090863P.
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PR 01-JUL-1998; 98US-0091359P.
PR 30-JUL-1998; 98US-0094651P.
PR 07-OCT-1998; 98US-0100038P.
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PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 98US-0113621P.
PR 08-MAR-1999; 98US-0113621P.
PR 10-MAR-1999; 98US-0123957P.
PR 12-MAR-1999; 98US-0123957P.
PR 29-MAR-1999; 98US-0126773P.
PR 21-APR-1999; 98US-0130232P.
PR 26-APR-1999; 98US-0131022P.
PR 28-APR-1999; 98US-0131445P.

PR 14-MAY-1999; 98US-0134287P.
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PR 23-JUN-1999; 98US-0141037P.
PR 07-JUL-1999; 98US-0142680P.
PR 26-JUL-1999; 98US-0145698P.
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PR 02-DEC-1999; 98US-0162506P.
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PR 11-FEB-2000; 98US-0162506P.
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PR 24-FEB-2000; 98US-0162506P.
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PR 20-JUN-2001; 98US-0162506P.
PR 29-JUN-2001; 98US-0162506P.
PR 09-JUL-2001; 98US-0162506P.
PR 30-JUL-2001; 98US-0162506P.

(GENTH ) GENTECH INC.
XX PA
XX PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gerber H, Gerritsen ME;
PI Goddard A, Godowski P, Girmaldi JC, Gurney AL, Hillan KJ;
PI Klawns TJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tamas D, Williams PM, Wood WI;
XX WP1: 2004-041374/04.
XX DR
XX XX
XX PT Novel PRO polypeptides useful for treating diabetes, kidney disorders
XX PT (Berger disease, celiac disease), pericyte-associated tumors, anemia,
XX PT arthritis, cardiac insufficiency disorders, treating peripheral
XX PT neuropathy.
XX XX
XX PS Example 114; SEQ ID NO 564; 457bp; English.
XX XX
XX CC The invention relates to an isolated PRO polypeptide (secreted or
XX CC transmembrane protein) having at least 80% amino acid sequence identity
XX CC to an amino acid sequence chosen from 94 fully defined sequences as given
XX CC in the specification (including PRO lacking its associated signal
XX CC peptide, a PRO extracellular domain with or without its associated signal
XX CC peptide). Also included are nucleic acids encoding the PRO proteins
XX CC mentioned above, a vector comprising a PRO nucleic acid, a host cell
XX CC comprising the vector and producing PRO, a chimeric molecule comprising
XX CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
XX CC antibody. PRO337 polypeptide is useful for detecting a PRO493
XX CC polypeptide in a sample suspected of containing PRO493 polypeptide.

Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 3.4e+02;
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Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy          395 GGGCGAAGCCCGCAGGCTC 414
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Db          20 GGGCGAGAGCCTTCAGGCTC 1

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ID ADF27985 standard; DNA; 21 BP.
XX
AC ADF27985;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human PRO 362 Taqman PCR probe.
XX
KW Human; 8q; PCR; secreted protein; transmembrane protein; PRO; cytosolic;
KW ophthalmological; antirheumatic; osteopathic; antirheumatic; vulnary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; probe; in situ hybridisation.
XX
OS Homo sapiens.
XX
PN US2003199437-A1.
XX
PD 23-OCT-2003.
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PF 16-OCT-2001; 2001US-00978665.
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PR 07-OCT-1998; 98WO-US021141.
PR 02-NOV-1998; 98US-00184216.
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PR 07-DEC-1998; 98US-00202054.
PR 22-DEC-1998; 98US-00218517.
PR 22-DEC-1998; 98US-0113286P.
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PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99US-00254465.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99US-00265686.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-00267213.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 12-APR-1999; 99US-00284291.
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PR 21-APR-1999; 99US-0130232P.
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PR 05-JAN-2000; 2000MO-US000219.
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PR 01-DEC-2000; 2000MO-US032678.
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PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
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PR 20-JUN-2001; 2001MO-US019692.
PR 29-JUN-2001; 2001MO-US021066.
PR 09-JUL-2001; 2001MO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
XX (GETH ) GENENTECH INC.
XX
XX Ashkenazi AJ, Baker KP, Botstein D, Desnovers L, Eaton DL,
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME,
Query Match 1.1%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred.No.3.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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RESULT 380
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ID ADFA1579 standard; DNA; 21 BP.
XX
AC ADFA1579;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human PRO 362 Tagman PCR probe.
XX
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vlnarary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; probe; in situ hybridisation.
XX
XX Homo sapiens.
XX
XX US2003199435-A1.
XX
XX 23-OCT-2003.
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XX 15-OCT-2001; 2001US-00978299.
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XX 17-OCT-1997; 97US-0062250P.
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XX  
XX (GETH ) GENENTECH INC.  
PA  
PI Ashkenazi AJ, Baker KP, Botstein D, Deansoyers L, Baton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Garber H, Gerritsen ME;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
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XX AC ADFF33258;  
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DT 12-FEB-2004 (first entry)

XX DE Human PRO 362 Tagman PCR probe.  
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KW ophthalmological; anitachytic; osteopathic; antirheumatic; vulnetary;  
KW audiotory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
XX OS Homo sapiens.  
XX PN US2003211091-A1.  
XX PD 13-NOV-2003.  
XX PF 25-OCT-2001; 2001US-00013918.  
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PR 02-MAR-2000; 2000WO-US005841.  
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PR 22-MAR-2001; 2001WO-US009552.  
PR 25-MAY-2001; 2001WO-US017092.  
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PR 20-JUN-2001; 2001WO-US019692.  
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PR 09-JUL-2001; 2001WO-US021735.  
PR 30-JUL-2001; 2001US-00918585.

XX (GETH ) GENENTECH INC.

PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gettier H, Gertlisen ME,  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
PI Kljavin LJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
PI Stewart TN, Tunas D, Williams PM, Wood WI;  
XX WPI; 2004-021571/02.

PT Novel PRO polypeptides useful for treating peripheral neuropathy,  
PT neuropathies associated with systemic disease such as post-polio syndrome  
or AIDS-associated syndrome.

PS Example 114; SEQ ID NO 564; 465bp; English.

XX The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC to an amino acid sequence chosen from 94 fully defined sequences as given  
CC in the specification (including PRO lacking its associated signal  
CC peptide, a PRO extracellular domain with or without its associated signal  
CC peptide). Also included are nucleic acids encoding the PRO proteins  
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
CC comprising the vector and producing PRO, a chimeric molecule comprising  
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
CC antibody. PRO337 polypeptide is useful for detecting a PRO493  
CC polypeptide in a sample suspected of containing PRO493 polypeptide.  
CC Similarly, PRO493 polypeptide is useful for detecting PRO337

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Db 20 GGCCGAGAGCCTTCAGGGTC 1

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XX ADF25624;

XX 12-FEB-2004 (first entry)

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KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vlnetary;  
KW auditory; tumour growth; retinal disorder; spots-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;

KW wound healing; hearing loss; probe; in situ hybridisation.  
OS Homo sapiens.

XX US2003211092-A1.

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XX 17-MAR-1998; 98US-00040220.  
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PR 30-DEC-1999; 99WO-US031243.  
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PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000277.  
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PR 11-FEB-2000; 2000WO-US003565.  
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PR 21-MAR-2000; 2000WO-US007532.  
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PR 17-MAY-2000; 2000WO-US013705.  
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PR 01-JUN-2001; 2001US-00872035.  
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PR 05-JUN-2001; 2001US-00874503.  
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PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.

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XX
XX (GETH ) GENENTECH INC.
XX
XX Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
XX Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gertsen ME;
XX Goddard A, Godowski PJ, Grimaldi JC, Gunney AL, Hillan KJ;
XX Kijavrin IU, Kuo SS, Napier MA, Pan J, Peoni NF, Roy MA, Shelton DL;
XX Stewart TA, Tumas D, Williams PM, Wood WI;
XX
XX WPI; 2004-021572/02.
XX
XX New nucleic acid encoded a secreted and transmembrane polypeptide, useful
XX for treating e.g. lung or breast tumors, osteoarthritis, rheumatoid
XX arthritis, obesity, diabetes, hyperinsulinemia, hypoinsulinemia or
XX wounds.
XX
XX Example 114; SEQ ID NO 564; 456bp; English.
XX
XX The invention relates to an isolated PRO polypeptide (secreted or
XX transmembrane protein) having at least 80% amino acid sequence identity
XX to an amino acid sequence chosen from 94 fully defined sequences as given
XX in the specification (including PRO lacking its associated signal
XX peptide, a PRO extracellular domain with or without its associated signal
XX peptide). Also included are nucleic acids encoding the PRO proteins
XX mentioned above, a vector comprising a PRO nucleic acid, a host cell
XX comprising the vector and producing PRO, a chimeric molecule comprising
XX PRO fused to a heterologous amino acid sequence, and an anti-PRO
XX antibody. PRO337 polypeptide is useful for detecting a PRO493
XX polypeptide in a sample suspected of containing PRO493 polypeptide.
XX Similarly, PRO493 polypeptide is useful for detecting PRO337
XX polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
XX PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
XX PRO725, PRO700 or PRO739. PRO493 polypeptide is useful for linking a
XX bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
XX molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
XX causes death of the cell. PRO337 polypeptide is useful for linking a
XX bioactive molecule to a cell expressing PRO493 polypeptide; PRO725,
XX PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
XX to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
XX useful for linking a bioactive molecule to a cell expressing PRO725,
XX PRO700 or PRO739 polypeptide. PRO493 polypeptide or anti-PRO337
XX polypeptide is useful for modulating at least one biological activity of
XX the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
XX polypeptide or anti-PRO493 polypeptide is useful for modulating the
XX biological activity of the cell expressing PRO493 polypeptide; PRO725,
XX PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
XX modulating the biological activity of the cell expressing PRO1559
XX polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
XX PRO739 polypeptide is useful for modulating the biological activity of
XX the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
XX polypeptides are useful for inhibiting tumor growth, retinal disorders,
XX sports-related joint problems, articular cartilage defects,
XX osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
XX mammals. The present sequence is a Tagman PCR probe used investigate PRO
XX gene amplification in certain tumour cell lines.
XX
XX Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No.3.4e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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XX 395 GGCGAAGGCCCGAGGTC 414
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XX Db 20 GGCGGAGGCGCTTACGGTC 1
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XX RESULT 383
XX ADF26725/C
XX ID ADF26725 standard; DNA; 21 BP.
XX
AC ADF26725;
XX
XX 12-FEB-2004 (first entry)
XX
XX Human PRO 362 Tagman PCR probe.
XX
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;
XX Ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnary;
XX auditory; tumor growth; retinal disorder; sports-related joint problem;
XX articular cartilage defects; osteoarthritis; rheumatoid arthritis;
XX wound healing; hearing loss; probe; in situ hybridisation.
XX
XX Homo sapiens.
XX
XX US2003199674-A1.
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XX 23-OCT-2003.
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XX 16-OCT-2001; 2001US-00978802.
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PR 10-MAR-1999; 99WO-US005190.
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PR 14-MAY-1999; 99WO-US010733.
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PR 16-JUN-1999; 99US-0139557P.
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PR 28-JUL-1999; 99US-0146222P.
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PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.

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PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US005819.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH ) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gertlisen ME;
PI Godowski PJ, Grimaldi JC, Gurney AB, Hillan KJ;
PI Kijavini IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2004-041393/04.
XX
PT New PRO polypeptides PRO200, PRO322, PRO540, PRO846 and PRO617 that
PT enhance the survival/proliferation of rod photoreceptor cells, useful for
PT treating retinal disorders or injuries e.g., sight loss in mammals.
PT
XX
PS Example 114; SEQ ID NO 564; 464pp; English.
PS
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide), a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell
CC comprising the vector and producing PRO, a chimeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337

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Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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QY 395 GGCCGAGGCCCGCAGGCTC 414
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RESULT 384  
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ID ADF34514 standard; DNA; 21 BP.  
XX  
AC ADF34514;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE Human PRO 362 Tagman PCR probe.  
XX  
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosstatic;



KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnery; auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
OS Homo sapiens.  
XX US2003194410-A1.  
XX 16-OCT-2003.  
XX 18-OCT-2001; 2001US-00145087.  
XX 18-FEB-2000; 2000MO-US004341.  
XX 30-JUL-2001; 2001US-00918585.  
XX (GETH ) GENENTECH INC.  
XX Ashkenazi AJ, Baker KP, Botstein D, Desnovers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen MB;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
PI Kijavrin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
PI Stewart TA, Tumas D, Williams PW, Wood WI;  
XX WPI; 2004-021069/02.  
XX  
XX New secreted and transmembrane PRO nucleic acid, for use in gene therapy,  
PT as a molecular weight marker for protein electrophoresis, as a  
PT hybridization probe or as a therapeutic agent.  
XX  
XX Example 114; SEQ ID NO 564; 461bp; English.  
XX  
XX The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC to an amino acid sequence chosen from 94 fully defined sequences as given  
CC in the specification (including PRO lacking its associated signal  
CC peptide, a PRO extracellular domain with or without its associated signal  
CC peptide). Also included are nucleic acids encoding the PRO proteins  
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
CC comprising the vector and producing PRO, a chimeric molecule comprising  
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
CC antibody. PRO337 polypeptide is useful for detecting a PRO493  
CC polypeptide in a sample suspected of containing PRO493 polypeptide.  
CC Similarly, PRO493 polypeptide is useful for detecting PRO337  
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
CC PRO725, PRO700 or PRO739. PRO493 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
CC causes death of the cell. PRO337 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO493 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
CC useful for linking a bioactive molecule to a cell expressing PRO725,  
CC PRO700 or PRO739 polypeptide. PRO493 polypeptide or anti-PRO337  
CC polypeptide is useful for modulating at least one biological activity of  
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
CC polypeptide or anti-PRO493 polypeptide is useful for modulating the  
CC biological activity of the cell expressing PRO493 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
CC modulating the biological activity of the cell expressing PRO1559  
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects,  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
CC mammals. The present sequence is a Tagman PCR probe used investigate PRO  
CC gene amplification in certain tumour cell lines.  
XX  
XX Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 395 GGCGAAGCGCCCGAGGTC 414  
Db 20 GGCGGAGGCGCTTCAGGTC 1  
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AC  
XX 12-FEB-2004 (first entry)  
DT  
XX Human PRO 362 Tagman PCR probe.  
DE  
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnery;  
KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
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XX  
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XX 24-OCT-2001; 2001US-00999829.  
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PR 07-JUL-1999; 99US-0142680P.

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PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH ) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Deenoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gertlisen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kijaviri TJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2004-021096/02.
XX
PT New nucleic acid encoding a secreted and transmembrane polypeptide,
PT useful for treating e.g. lung or breast tumors, osteoarthritis,
PT rheumatoid arthritis, obesity, diabetes, hyperinsulinemia,
PT hyperinsulinemia or wounds.
XX
PS Example 114; SEQ ID NO 564; 460bp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell
CC comprising the vector and producing PRO, a chimeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.

```

Query Match 1.1%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 3.4e+02; Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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OY 395 GCGCGAAGCCCGCAGGATC 414
Db 20 GCGCGAAGCCCTTCAGGATC 1

```

RESULT 386  
ADG50737/C  
ID ADG50737 standard; DNA; 21 BP.  
AC ADG50737;  
XX  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE Human PRO 362 Taqman PCR probe.  
XX  
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytoskeletal;  
KW ophthalmological; antiarthritic; osteopathic; anti-rheumatic; vulnery;  
KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
XX  
XX Homo sapiens.  
XX  
XX US2003207803-A1.  
XX  
XX 06-NOV-2003.  
XX  
XX 19-OCT-2001; 2001US-00143026.  
XX  
XX 28-MAY-1998; 98US-0087106P.  
XX 30-JUL-1998; 98US-0094651P.  
XX 08-MAR-1999; 99WO-US005028.  
XX 25-AUG-1999; 99US-00380138.  
XX 18-FEB-2000; 2000WO-US004341.  
XX 30-JUL-2001; 2001US-00918585.  
XX  
XX (GETH ) GENENTECH INC.  
XX  
XX Ashkenazi AJ, Baker KP, Botstein D, Desnovers L, Eaton DL;  
XX Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;  
XX Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
XX Kljavin IJ, Kuo SS, Nessler MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
XX Stewart TM, Tumes D, Williams PM, Wood WJ;  
XX  
XX WPI; 2004-021515/02.  
XX  
XX New genes and encoded secreted and transmembrane polypeptides, useful for  
XX treating e.g. lung or breast tumors, osteoarthritis, rheumatoid  
XX arthritis, obesity, diabetes, hyperinsulinemia, hypoinsulinemia or  
XX wounds.  
XX  
XX Example 114; SEQ ID NO 564; 463bp; English.  
XX  
XX The invention relates to an isolated PRO polypeptide (secreted or  
XX transmembrane protein) having at least 80% amino acid sequence identity  
XX to an amino acid sequence chosen from 94 fully defined sequences as given  
XX in the specification (including PRO lacking its associated signal  
XX peptide, a PRO extracellular domain with or without its associated signal  
XX peptide). Also included are nucleic acids encoding the PRO proteins  
XX mentioned above, a vector comprising a PRO nucleic acid, a host cell  
XX comprising the vector and producing PRO, a chimeric molecule comprising  
XX PRO fused to a heterologous amino acid sequence, and an anti-PRO  
XX antibody. PRO337 polypeptide is useful for detecting a PRO4993  
XX polypeptide in a sample suspected of containing PRO4993 polypeptide.  
XX Similarly, PRO4993 polypeptide is useful for detecting PRO337  
XX polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
XX PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
XX PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
XX bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
XX molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
XX causes death of the cell. PRO337 polypeptide is useful for linking a  
XX bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,  
XX PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
XX to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
XX useful for linking a bioactive molecule to a cell expressing PRO725,  
XX PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
XX polypeptide is useful for modulating at least one biological activity of

CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
CC modulating the biological activity of the cell expressing PRO1559  
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects,  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
CC mammals. The present sequence is a Taqman PCR probe used investigate PRO  
CC gene amplification in certain tumour cell lines.  
XX  
XX Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
XX  
XX  
XX Query Match 1.1%; Score 15.2; DB 1; Length 21;  
XX Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX  
XX 395 GGCCGAGGCCCGCAGGCTC 414  
XX DB 20 GGCCGAGGCCCTCAGGCTC 1  
XX  
XX  
XX RESULT 387  
XX ADG50113/C  
XX ID ADG50113 standard; DNA; 21 BP.  
XX  
XX ADG50113;  
XX  
XX 11-MAR-2004 (first entry)  
XX  
XX  
XX Human PRO 362 Taqman PCR probe.  
XX  
XX  
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytoskeletal;  
XX ophthalmological; antiarthritic; osteopathic; anti-rheumatic; vulnery;  
XX auditory; tumour growth; retinal disorder; sports-related joint problem;  
XX articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
XX wound healing; hearing loss; probe; in situ hybridisation.  
XX  
XX Homo sapiens.  
XX  
XX US2003215905-A1.  
XX  
XX 20-NOV-2003.  
XX  
XX 25-OCT-2001; 2001US-00013928.  
XX  
XX 07-OCT-1998; 98WO-US021141.  
XX 20-NOV-1998; 98WO-US024855.  
XX 05-JAN-1999; 99WO-US000106.  
XX 08-MAR-1999; 99WO-US005028.  
XX 10-MAR-1999; 99WO-US005190.  
XX 28-APR-1999; 99US-0131445P.  
XX 14-MAY-1999; 99WO-US010733.  
XX 02-JUN-1999; 99WO-US012252.  
XX 25-AUG-1999; 99US-00380138.  
XX 30-NOV-1999; 99WO-US028313.  
XX 02-DEC-1999; 99WO-US028551.  
XX 16-DEC-1999; 99WO-US028565.  
XX 30-DEC-1999; 99WO-US030095.  
XX 30-DEC-1999; 99WO-US031243.  
XX 30-DEC-1999; 99WO-US031274.  
XX 05-JAN-2000; 2000WO-US000219.  
XX 06-JAN-2000; 2000WO-US000277.  
XX 11-FEB-2000; 2000WO-US000376.  
XX 18-FEB-2000; 2000WO-US003565.  
XX 24-FEB-2000; 2000WO-US004341.  
XX 02-MAR-2000; 2000WO-US005004.  
XX 10-MAR-2000; 2000WO-US005841.  
XX 21-MAR-2000; 2000WO-US007532.

PR 30-MAR-2000; 2000WO-US008439.  
 PR 17-MAY-2000; 2000WO-US013705.  
 PR 22-MAY-2000; 2000WO-US014042.  
 PR 30-MAY-2000; 2000WO-US014941.  
 PR 02-JUN-2000; 2000WO-US015264.  
 PR 28-JUL-2000; 2000WO-US020710.  
 PR 24-AUG-2000; 2000WO-US023328.  
 PR 01-DEC-2000; 2000WO-US032678.  
 PR 20-DEC-2000; 2000WO-US034956.  
 PR 28-FEB-2001; 2001WO-US006520.  
 PR 22-MAR-2001; 2001WO-US009552.  
 PR 25-MAY-2001; 2001WO-US017092.  
 PR 01-JUN-2001; 2001WO-US017800.  
 PR 20-JUN-2001; 2001WO-US019692.  
 PR 29-JUN-2001; 2001WO-US021066.  
 PR 09-JUL-2001; 2001WO-US021735.  
 PR 30-JUL-2001; 2001US-00918585.

(GETH ) GENENTECH INC.

PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
 PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerdner H, Gerritsen ME;  
 PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
 PI Kijavini IU, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
 PI Stewart TA, Tumas D, Williams PM, Wood WI;  
 DR WPI; 2004-080683/08.

PT New PRO nucleic acid, useful for manufacturing a medicament for  
 PT diagnosing or treating tumor or for tissue typing.

PS Example 114; SEQ ID NO 564; 454pp; English.

CC The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 94 fully defined sequences as given  
 CC in the specification (including PRO lacking its associated signal  
 CC peptide), a PRO extracellular domain with or without its associated signal  
 CC peptide). Also included are nucleic acids encoding the PRO proteins  
 CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
 CC comprising the vector and producing PRO, a chimeric molecule comprising  
 CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
 CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
 CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
 CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
 CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
 CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
 CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for detecting a  
 CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
 CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
 CC causes death of the cell. PRO337 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,  
 CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
 CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
 CC useful for linking a bioactive molecule to a cell expressing PRO725,  
 CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
 CC polypeptide is useful for modulating at least one biological activity of  
 CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
 CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
 CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,  
 CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
 CC modulating the biological activity of the cell expressing PRO1559  
 CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
 CC PRO739 polypeptide is useful for modulating the biological activity of  
 CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
 CC polypeptides are useful for inhibiting tumor growth, retinal disorders,  
 CC sports-related joint problems, articular cartilage defects,  
 CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
 CC mammals. The present sequence is a Taqman PCR probe used investigate PRO  
 CC gene amplification in certain tumor cell lines.

XX Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 395 GGCCGAAGGCCCGAGGTC 414  
 Db 20 GGCCGAGGCTTCAGGTC 1

RESULT 388  
 ADG51985/c  
 ID ADG51985 standard; DNA; 21 BP.

AC ADG51985;

DT 11-MAR-2004 (first entry)

DE Human PRO 362 Taqman PCR probe.

XX Human; 66; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
 KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnary;  
 KW auditory; tumor growth; retinal disorder; sports-related joint problem;  
 KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
 KW wound healing; hearing loss; probe; in situ hybridisation.

XX Homo sapiens.

PN US2003215908-A1.

PD 20-NOV-2003.

PF 19-OCT-2001; 2001US-00162522.

XX 06-MAY-1998; 98US-0084441P.  
 PR 08-MAR-1999; 99MO-US005028.  
 PR 25-AUG-1999; 99US-00380138.  
 PR 30-NOV-1999; 99MO-US028313.  
 PR 18-FEB-2000; 2000WO-US004341.  
 PR 30-JUL-2001; 2001US-00918585.

PA (GETH ) GENENTECH INC.

PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
 PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerdner H, Gerritsen ME;  
 PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
 PI Kijavini IU, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
 PI Stewart TA, Tumas D, Williams PM, Wood WI;  
 DR WPI; 2004-021841/02.

PT New PRO nucleic acid, useful for manufacturing a medicament for  
 PT diagnosing or treating tumor or for tissue typing.

PS Example 114; SEQ ID NO 564; 453pp; English.

CC The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 94 fully defined sequences as given  
 CC in the specification (including PRO lacking its associated signal  
 CC peptide), a PRO extracellular domain with or without its associated signal  
 CC peptide). Also included are nucleic acids encoding the PRO proteins  
 CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
 CC comprising the vector and producing PRO, a chimeric molecule comprising  
 CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
 CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
 CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
 CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
 CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
 CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
 CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
 CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
 CC causes death of the cell. PRO337 polypeptide is useful for linking a

CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
CC useful for linking a bioactive molecule to a cell expressing PRO725,  
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
CC polypeptide is useful for modulating at least one biological activity of  
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
CC modulating the biological activity of the cell expressing PRO1559  
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects,  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
CC mammals. The present sequence is a Tagman PCR probe used investigate PRO  
CC gene amplification in certain tumour cell lines.

SO Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred.No.3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 395 GCGCGAGCGCCGACGGTC 414  
DB 20 GCGCGAGCGCTTCAGGTC 1  
|||||

RESULT 389  
ADG49489/C  
ID ADG49489 standard; DNA; 21 BP.  
XX  
XX ADG49489;  
XX  
XX 11-MAR-2004 (first entry)  
XX  
XX Human PRO 362 Tagman PCR probe.  
XX  
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
XX optthalmological; antiarthritic; osteopathic; antirheumatic; vulnary;  
XX audiotory; tumour growth; retinal disorder; sports-related joint problem;  
XX articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
XX wound healing; hearing loss; probe; in situ hybridisation.  
XX  
XX Homo sapiens.  
XX OS  
XX US2003216305-A1.  
XX  
XX 20-NOV-2003.  
XX  
XX 25-OCT-2001; 2001US-00013923.  
XX  
XX 17-OCT-1997; 97US-0062250P.  
XX 13-NOV-1997; 97US-0065311P.  
XX 18-NOV-1997; 97US-0065249P.  
XX 21-NOV-1997; 97US-0066364P.  
XX 10-MAR-1998; 98US-0077450P.  
XX 11-MAR-1998; 98US-0077632P.  
XX 11-MAR-1998; 98US-0077641P.  
XX 11-MAR-1998; 98US-0077649P.  
XX 12-MAR-1998; 98US-0077791P.  
XX 13-MAR-1998; 98US-0078004P.  
XX 20-MAR-1998; 98US-0078866P.  
XX 20-MAR-1998; 98US-0078910P.  
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XX 25-MAR-1998; 98US-0079294P.  
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PR 30-MAR-1998; 98US-0079920P.  
PR 30-MAR-1998; 98US-0079923P.  
PR 31-MAR-1998; 98US-0080105P.  
PR 31-MAR-1998; 98US-0080107P.  
PR 31-MAR-1998; 98US-0080165P.  
PR 31-MAR-1998; 98US-0080194P.  
PR 01-APR-1998; 98US-0080327P.  
PR 01-APR-1998; 98US-0080328P.  
PR 01-APR-1998; 98US-0080333P.  
PR 01-APR-1998; 98US-0080334P.  
PR 08-APR-1998; 98US-0081049P.  
PR 08-APR-1998; 98US-0081070P.  
PR 08-APR-1998; 98US-0081071P.  
PR 09-APR-1998; 98US-0081195P.  
PR 09-APR-1998; 98US-0081203P.  
PR 09-APR-1998; 98US-0081229P.  
PR 15-APR-1998; 98US-0081817P.  
PR 15-APR-1998; 98US-0081819P.  
PR 15-APR-1998; 98US-0081838P.  
PR 15-APR-1998; 98US-0081952P.  
PR 15-APR-1998; 98US-0081955P.  
PR 20-APR-1998; 98US-0082322P.  
PR 21-APR-1998; 98US-0082568P.  
PR 21-APR-1998; 98US-0082569P.  
PR 22-APR-1998; 98US-0082700P.  
PR 22-APR-1998; 98US-0082704P.  
PR 22-APR-1998; 98US-0082797P.  
PR 22-APR-1998; 98US-0082804P.  
PR 23-APR-1998; 98US-0082796P.  
PR 27-APR-1998; 98US-0083336P.  
PR 29-APR-1998; 98US-0083332P.  
PR 29-APR-1998; 98US-0083495P.  
PR 29-APR-1998; 98US-0083496P.  
PR 29-APR-1998; 98US-0083499P.  
PR 29-APR-1998; 98US-0083500P.  
PR 29-APR-1998; 98US-0083545P.  
PR 29-APR-1998; 98US-0083554P.  
PR 29-APR-1998; 98US-0083558P.  
PR 29-APR-1998; 98US-0083559P.  
PR 30-APR-1998; 98US-0083742P.  
PR 05-MAY-1998; 98US-0084366P.  
PR 06-MAY-1998; 98US-0084414P.  
PR 06-MAY-1998; 98US-0084441P.  
PR 07-MAY-1998; 98US-0084598P.  
PR 07-MAY-1998; 98US-0084599P.  
PR 07-MAY-1998; 98US-0084600P.  
PR 07-MAY-1998; 98US-0084627P.  
PR 07-MAY-1998; 98US-0084637P.  
PR 07-MAY-1998; 98US-0084639P.  
PR 07-MAY-1998; 98US-0084640P.  
PR 07-MAY-1998; 98US-0084643P.  
PR 13-MAY-1998; 98US-0085323P.  
PR 13-MAY-1998; 98US-0085338P.  
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PR 15-MAY-1998; 98US-0085573P.  
PR 15-MAY-1998; 98US-0085579P.  
PR 15-MAY-1998; 98US-0085580P.  
PR 15-MAY-1998; 98US-0085582P.  
PR 15-MAY-1998; 98US-0085689P.  
PR 15-MAY-1998; 98US-0085697P.  
PR 15-MAY-1998; 98US-0085700P.  
PR 15-MAY-1998; 98US-0085704P.  
PR 18-MAY-1998; 98US-0086023P.  
PR 22-MAY-1998; 98US-0086329P.  
PR 22-MAY-1998; 98US-0086414P.  
PR 22-MAY-1998; 98US-0086430P.  
PR 22-MAY-1998; 98US-0086486P.  
PR 28-MAY-1998; 98US-0087098P.  
PR 28-MAY-1998; 98US-0087106P.  
PR 28-MAY-1998; 98US-0087208P.  
PR 26-JUN-1998; 98US-0090863P.

PR 26-JUN-1998; 98US-0091010P.  
PR 01-JUL-1998; 98US-0091359P.  
PR 30-JUL-1998; 98US-0094651P.  
PR 11-SEP-1998; 98US-0100038P.  
PR 07-OCT-1998; 98US-01002141.  
PR 20-NOV-1998; 98US-0109304P.  
PR 20-NOV-1998; 98US-0109304P.  
PR 22-DEC-1998; 98US-0113296P.  
PR 23-DEC-1998; 98US-0113621P.  
PR 05-JAN-1999; 98US-013621P.  
PR 08-MAR-1999; 98US-013621P.  
PR 10-MAR-1999; 98US-013621P.  
PR 12-MAR-1999; 98US-013621P.  
PR 21-APR-1999; 98US-013621P.  
PR 26-APR-1999; 98US-013621P.  
PR 28-APR-1999; 98US-013621P.  
PR 14-MAY-1999; 98US-013621P.  
PR 14-MAY-1999; 98US-013621P.  
PR 02-JUN-1999; 98US-013621P.  
PR 16-JUN-1999; 98US-013621P.  
PR 23-JUN-1999; 98US-013621P.  
PR 07-JUL-1999; 98US-013621P.  
PR 26-JUL-1999; 98US-013621P.  
PR 28-JUL-1999; 98US-013621P.  
PR 29-OCT-1999; 98US-013621P.  
PR 30-NOV-1999; 98US-013621P.  
PR 02-DEC-1999; 98US-013621P.  
PR 16-DEC-1999; 98US-013621P.  
PR 30-DEC-1999; 98US-013621P.  
PR 05-JAN-2000; 98US-013621P.  
PR 06-JAN-2000; 98US-013621P.  
PR 11-FEB-2000; 98US-013621P.  
PR 18-FEB-2000; 98US-013621P.  
PR 24-FEB-2000; 98US-013621P.  
PR 02-MAR-2000; 98US-013621P.  
PR 10-MAR-2000; 98US-013621P.  
PR 21-MAR-2000; 98US-013621P.  
PR 30-MAR-2000; 98US-013621P.  
PR 17-MAY-2000; 98US-013621P.  
PR 22-MAY-2000; 98US-013621P.  
PR 30-MAY-2000; 98US-013621P.  
PR 02-JUN-2000; 98US-013621P.  
PR 28-JUL-2000; 98US-013621P.  
PR 24-AUG-2000; 98US-013621P.  
PR 01-DEC-2000; 98US-013621P.  
PR 20-DEC-2000; 98US-013621P.  
PR 28-FEB-2001; 98US-013621P.  
PR 22-MAR-2001; 98US-013621P.  
PR 25-MAY-2001; 98US-013621P.  
PR 01-JUN-2001; 98US-013621P.  
PR 20-JUN-2001; 98US-013621P.  
PR 29-JUN-2001; 98US-013621P.  
PR 09-JUL-2001; 98US-013621P.  
PR 30-JUL-2001; 98US-013621P.  
PR (GETH ) GENENTECH INC.  
XX Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL,  
XX Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerltsen ME,  
XX Goddard A, Godowski PJ, Grimaldi JC, Gunney AL, Hillan KJ,  
XX Kijavain IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL,  
XX Stewart TA, Tumas D, Williams PM, Wood WI;  
XX WPI; 2004-033145/03.  
XX New secreted and transmembrane PRO polypeptide useful as a molecular  
XX weight marker and for treating arthritis, chalassemia, diabetes, or  
XX cardiac insufficiency disorders.

PS Example 114, SEQ ID NO 564; 456bp; English.  
XX The invention relates to an isolated PRO polypeptide (secreted or  
XX transmembrane protein) having at least 80% amino acid sequence identity  
XX to an amino acid sequence chosen from 94 fully defined sequences as given  
XX in the specification (including PRO lacking its associated signal  
XX peptide), a PRO extracellular domain with or without its associated signal  
XX peptide). Also included are nucleic acids encoding the PRO proteins  
XX mentioned above, a vector comprising a PRO nucleic acid, a host cell  
XX comprising the vector and producing PRO, a chimeric molecule comprising  
XX CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
XX antibody. PRO337 polypeptide is useful for detecting a PRO4993  
XX polypeptide in a sample suspected of containing PRO4993 polypeptide.  
XX Similarly, PRO4993 polypeptide is useful for detecting PRO337  
Query Match 1.4%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 395 GCGCGAAGCGCCGAGGCTC 414  
Db 20 GCGCGAAGCGCTTCAGGCTC 1  
RESULT 390  
ADG48865/c  
ID ADG48865 standard; DNA; 21 BP.  
XX  
AC ADG48865;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE Human PRO 362 Taqman PCR probe.  
XX  
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
KW ophthalmological; antitumor; osteoporosis; antineoplastic; vulnery;  
KW auditory; tumor growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridization.  
XX  
OS Homo sapiens.  
XX  
XX US2003216560-A1.  
XX  
PD 20-NOV-2003.  
XX  
XX 25-OCT-2001; 2001US-00013925.  
XX  
PR 17-OCT-1997; 97US-0062250P.  
PR 03-NOV-1997; 97US-0064249P.  
PR 13-NOV-1997; 97US-0065311P.  
PR 21-NOV-1997; 97US-0066364P.  
PR 10-MAR-1998; 97US-0077450P.  
PR 11-MAR-1998; 97US-0077632P.  
PR 11-MAR-1998; 97US-0077641P.  
PR 11-MAR-1998; 97US-0077649P.  
PR 12-MAR-1998; 97US-0077791P.  
PR 13-MAR-1998; 97US-0078004P.  
PR 20-MAR-1998; 97US-0078886P.  
PR 20-MAR-1998; 97US-0078910P.  
PR 20-MAR-1998; 97US-0078936P.  
PR 20-MAR-1998; 97US-0078939P.  
PR 25-MAR-1998; 97US-0079294P.  
PR 26-MAR-1998; 97US-0079656P.  
PR 27-MAR-1998; 97US-0079663P.  
PR 27-MAR-1998; 97US-0079664P.  
PR 27-MAR-1998; 97US-0079689P.  
PR 27-MAR-1998; 97US-0079788P.  
PR 27-MAR-1998; 97US-0079788P.  
PR 30-MAR-1998; 97US-0079920P.  
PR 31-MAR-1998; 97US-0080105P.  
PR 31-MAR-1998; 97US-0080107P.

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PR 31-MAR-1998; 98US-0080165P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080328P.
PR 01-APR-1998; 98US-0080333P.
PR 01-APR-1998; 98US-0080334P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 08-APR-1998; 98US-0081071P.
PR 09-APR-1998; 98US-0081195P.
PR 09-APR-1998; 98US-0081203P.
PR 09-APR-1998; 98US-0081229P.
PR 15-APR-1998; 98US-0081817P.
PR 15-APR-1998; 98US-0081838P.
PR 15-APR-1998; 98US-0081952P.
PR 15-APR-1998; 98US-0081955P.
PR 21-APR-1998; 98US-0082568P.
PR 21-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082700P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082797P.
PR 22-APR-1998; 98US-0082804P.
PR 23-APR-1998; 98US-0083336P.
PR 27-APR-1998; 98US-0083336P.
PR 28-APR-1998; 98US-0083332P.
PR 29-APR-1998; 98US-0083392P.
PR 29-APR-1998; 98US-0083495P.
PR 29-APR-1998; 98US-0083496P.
PR 29-APR-1998; 98US-0083499P.
PR 29-APR-1998; 98US-0083500P.
PR 29-APR-1998; 98US-0083545P.
PR 29-APR-1998; 98US-0083554P.
PR 29-APR-1998; 98US-0083588P.
PR 29-APR-1998; 98US-0083599P.
PR 30-APR-1998; 98US-0083742P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 07-MAY-1998; 98US-0084598P.
PR 07-MAY-1998; 98US-0084600P.
PR 07-MAY-1998; 98US-0084627P.
PR 07-MAY-1998; 98US-0084637P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 13-MAY-1998; 98US-0084643P.
PR 13-MAY-1998; 98US-0085323P.
PR 13-MAY-1998; 98US-0085338P.
PR 13-MAY-1998; 98US-0085339P.
PR 15-MAY-1998; 98US-0085573P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085689P.
PR 15-MAY-1998; 98US-0085697P.
PR 15-MAY-1998; 98US-0085700P.
PR 15-MAY-1998; 98US-0085704P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086414P.
PR 22-MAY-1998; 98US-0086430P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087096P.
PR 28-MAY-1998; 98US-0087106P.
PR 28-MAY-1998; 98US-0087208P.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98US-0109304P.
PR 20-NOV-1998; 98WO-US024855.

PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-0139517P.
PR 29-MAR-1999; 99US-0126773P.
PR 21-APR-1999; 99US-0130232P.
PR 26-APR-1999; 99US-0131022P.
PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-0134287P.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
PR 23-JUN-1999; 99US-0141037P.
PR 07-JUL-1999; 99US-0142680P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US0000219.
PR 06-JAN-2000; 2000WO-US0000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 28-AUG-2000; 2000WO-US023278.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.

XX (GENTH ) GENEENTECH INC.
PA
XX
XX Ashkenazi AJ, Baker KP, Borstein D, Desnoyers L, Eaton DL;
PI Petrára N, Filvarsoff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PU, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan U, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
XX WPI; 2004-033149/03.
XX
XX New PRO polypeptide useful for treating peripheral neuropathy,
PT neuropathies associated with systemic disease such as post-polio syndrome
PT or acquired immunodeficiency syndrome-associated syndrome.
XX
XX Example 114; SEQ ID NO 564; 454bp; English.
XX
XX The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
```

peptide). Also included are nucleic acids encoding the PRO proteins mentioned above, a vector comprising a PRO nucleic acid, a host cell comprising the vector and producing PRO, a chimaeric molecule comprising CC PRO fused to a heterologous amino acid sequence, and an anti-PRO antibody. PRO337 polypeptide is useful for detecting a PRO4993 CC polypeptide in a sample suspected of containing PRO4993 polypeptide. Similarly, PRO4993 polypeptide is useful for detecting PRO337

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

395 GGCCGAGAGCCCTTCAGGCTC 414  
20 GGCCGAGAGCCCTTCAGGCTC 1

RESULT 391  
ADG51361/c  
ID ADG51361 standard; DNA; 21 BP.  
XX  
AC ADG51361;  
XX  
DT 25-MAR-2004 (first entry)  
XX  
DE Human PRO 362 Taqman PCR probe.  
XX  
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnary;  
KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
XX  
OS Homo sapiens.  
XX  
PN US2004005312-A1.  
XX  
PD 08-JAN-2004.  
XX  
PF 18-OCT-2001; 2001US-00145093.  
XX  
PR 15-APR-1998; 98US-0081952P.  
PR 08-MAR-1999; 99WO-US005028.  
PR 25-AUG-1999; 99US-00380138.  
PR 30-NOV-1999; 99WO-US028313.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
PA (GETH ) GENENTECH INC.  
XX  
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gertlisen ME;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gunney AL, Hillan KJ;  
PI Kijavrin JJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
PI Stewart TA, Tumas D, Williams FM, Wood WI;  
XX  
XX WPI; 2004-081694/08.  
XX  
DR New secreted and transmembrane PRO polypeptides and nucleic acids, useful  
PT in gene therapy for treating obesity or diabetes, in chromosome and gene  
PT mapping, as chromosome markers, in tissue typing, and in identifying  
PT chromosome.  
XX  
XX Example 114; SEQ ID NO 564; 462pp; English.  
XX  
XX The invention relates to an isolated PRO polypeptide (secreted or  
XX transmembrane protein) having at least 80% amino acid sequence identity  
XX to an amino acid sequence chosen from 94 fully defined sequences as given  
XX in the specification (including PRO lacking its associated signal  
XX peptide, a PRO extracellular domain with or without its associated signal  
XX peptide). Also included are nucleic acids encoding the PRO proteins  
XX mentioned above, a vector comprising a PRO nucleic acid, a host cell  
XX comprising the vector and producing PRO, a chimaeric molecule comprising

CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
CC causes death of the cell. PRO337 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO4993 polypeptide. PRO725,  
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
CC to a cell expressing PRO1559 polypeptide, and PRO1559 polypeptide is  
CC useful for linking a bioactive molecule to a cell expressing PRO725,  
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
CC polypeptide is useful for modulating at least one biological activity of  
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
CC biological activity of the cell expressing PRO4993 polypeptide. PRO725,  
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
CC modulating the biological activity of the cell expressing PRO1559  
CC polypeptide, and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects,  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
CC mammals. The present sequence is a Taqman PCR probe used investigate PRO  
CC gene amplification in certain tumour cell lines.  
XX  
SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

395 GGCCGAGAGCCCTTCAGGCTC 414  
20 GGCCGAGAGCCCTTCAGGCTC 1

RESULT 392  
ADG59305/c  
ID ADG59305 standard; DNA; 21 BP.  
XX  
AC ADG59305;  
XX  
DT 25-MAR-2004 (first entry)  
XX  
DE Human PRO 362 Taqman PCR probe.  
XX  
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnary;  
KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
KW wound healing; hearing loss; probe; in situ hybridisation.  
XX  
XX Homo sapiens.  
XX  
OS US2004005657-A1.  
XX  
PN US2004005657-A1.  
XX  
PD 08-JAN-2004.  
XX  
PF 25-OCT-2001; 2001US-00013919.  
XX  
PR 15-APR-1998; 98US-0081952P.  
PR 08-MAR-1999; 99WO-US005028.  
PR 25-AUG-1999; 99US-00380138.  
PR 30-NOV-1999; 99WO-US028313.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
XX (GETH ) GENENTECH INC.



XX Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gether H, Gertlesen ME;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gunney AL, Hillan KJ;  
PI Kijavrin IJ, Kuo SS, Napier MA, Pan J, Pham NF, Roy MA, Shelton DL;  
PI Stewart TA, Tunes D, Williams PM, Wood WI;  
XX WPI; 2004-081722/08.  
XX  
XX  
XX New secreted and transmembrane PRO polypeptides and nucleic acid  
PT molecules, useful in gene therapy, or for diagnosing and treating  
PT neoplastic cell growth and proliferation, diabetes or cardiac  
PT insufficiency disorders in mammals.  
XX  
XX  
XX Example 114; SEQ ID NO 564; 463bp; English.  
XX  
XX The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC to an amino acid sequence chosen from 94 fully defined sequences as given  
CC in the specification (including PRO lacking its associated signal  
CC peptide, a PRO extracellular domain with or without its associated signal  
CC peptide). Also included are nucleic acids encoding the PRO proteins  
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
CC comprising the vector and producing PRO, a chimaeric molecule comprising  
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
CC causes death of the cell. PRO337 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
CC useful for linking a bioactive molecule to a cell expressing PRO725,  
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
CC polypeptide is useful for modulating at least one biological activity of  
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
CC modulating the biological activity of the cell expressing PRO1559  
CC polypeptide; and PRO1559 polypeptide or anti-PRO700 or anti-  
CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects,  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
CC mammals. The present sequence is a Taqman PCR probe used investigate PRO  
CC gene amplification in certain tumour cell lines.  
XX  
SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 395 GGCGAGGCGCGAGGTC 414  
Db ||||| ||||| |||||  
20 GGCGAGGCGCTTCGGGTC 1  
XX  
RESULT 393  
ADG62761/c  
ID ADG62761 standard; DNA; 21 BP.  
XX  
AC ADG62761;  
XX  
DT 25-MAR-2004 (first entry)  
XX

DE Human PRO 362 Taqman PCR probe.  
XX  
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnery;  
KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
XX wound healing; hearing loss; probe; in situ hybridisation.  
XX  
OS Homo sapiens.  
XX  
FN US2004006219-A1.  
XX  
PD 08-JAN-2004.  
XX  
XX  
XX 25-OCT-2001; 2001US-00013920.  
XX  
XX 17-OCT-1997; 97US-0062250P.  
XX 03-NOV-1997; 97US-0064249P.  
XX 13-NOV-1997; 97US-0065311P.  
XX 21-NOV-1997; 97US-0065364P.  
XX 10-MAR-1998; 98US-0077450P.  
XX 11-MAR-1998; 98US-0077632P.  
XX 11-MAR-1998; 98US-0077641P.  
XX 11-MAR-1998; 98US-0077649P.  
XX 12-MAR-1998; 98US-0077791P.  
XX 13-MAR-1998; 98US-0078004P.  
XX 20-MAR-1998; 98US-0078886P.  
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XX 20-MAR-1998; 98US-0078936P.  
XX 20-MAR-1998; 98US-0078939P.  
XX 25-MAR-1998; 98US-0079294P.  
XX 26-MAR-1998; 98US-0079656P.  
XX 27-MAR-1998; 98US-0079663P.  
XX 27-MAR-1998; 98US-0079664P.  
XX 27-MAR-1998; 98US-0079689P.  
XX 27-MAR-1998; 98US-0079728P.  
XX 27-MAR-1998; 98US-0079786P.  
XX 30-MAR-1998; 98US-0079920P.  
XX 30-MAR-1998; 98US-0079923P.  
XX 31-MAR-1998; 98US-0080105P.  
XX 29-APR-1998; 98US-0083392P.  
XX 29-APR-1998; 98US-0083495P.  
XX 29-APR-1998; 98US-0083496P.  
XX 29-APR-1998; 98US-0083499P.  
XX 29-APR-1998; 98US-0083500P.  
XX 29-APR-1998; 98US-0083545P.  
XX 29-APR-1998; 98US-0083554P.  
XX 29-APR-1998; 98US-0083558P.  
XX 29-APR-1998; 98US-0083559P.  
XX 30-APR-1998; 98US-0083742P.  
XX 05-MAY-1998; 98US-0084366P.  
XX 06-MAY-1998; 98US-0084414P.  
XX 06-MAY-1998; 98US-0084441P.  
XX 07-MAY-1998; 98US-0084598P.  
XX 07-MAY-1998; 98US-0084600P.  
XX 07-MAY-1998; 98US-0084627P.  
XX 07-MAY-1998; 98US-0084637P.  
XX 07-MAY-1998; 98US-0084639P.  
XX 07-MAY-1998; 98US-0084640P.  
XX 13-MAY-1998; 98US-0085323P.  
XX 13-MAY-1998; 98US-0085338P.  
XX 13-MAY-1998; 98US-0085339P.  
XX 13-MAY-1998; 98US-0085373P.  
XX 15-MAY-1998; 98US-0085579P.  
XX 15-MAY-1998; 98US-0085580P.  
XX 15-MAY-1998; 98US-0085582P.  
XX 15-MAY-1998; 98US-0085689P.  
XX 15-MAY-1998; 98US-0085697P.  
XX 15-MAY-1998; 98US-0085700P.  
XX 15-MAY-1998; 98US-0085704P.  
XX 18-MAY-1998; 98US-0086023P.  
XX 22-MAY-1998; 98US-0086392P.

PR 22-MAY-1998; 98US-0086414P.  
 PR 22-MAY-1998; 98US-0086430P.  
 PR 22-MAY-1998; 98US-0086486P.  
 PR 28-MAY-1998; 98US-0087098P.  
 PR 28-MAY-1998; 98US-0087106P.  
 PR 28-MAY-1998; 98US-0087208P.  
 PR 26-JUN-1998; 98US-0090863P.  
 PR 26-JUN-1998; 98US-0091010P.  
 PR 01-JUL-1998; 98US-0091359P.  
 PR 30-JUL-1998; 98US-0094651P.  
 PR 11-SEP-1998; 98US-0100038P.  
 PR 07-OCT-1998; 98WO-US021141.  
 PR 20-NOV-1998; 98US-0109304P.  
 PR 20-NOV-1998; 98WO-US024835.  
 PR 22-DEC-1998; 98US-0113296P.  
 PR 23-DEC-1998; 98US-0113621P.  
 PR 05-JAN-1999; 99WO-US000106.  
 PR 08-MAR-1999; 99WO-US005028.  
 PR 10-MAR-1999; 99WO-US005190.  
 PR 12-MAR-1999; 99US-0123957P.  
 PR 29-MAR-1999; 99US-0126773P.  
 PR 21-APR-1999; 99US-0130232P.  
 PR 26-APR-1999; 99US-0131022P.  
 PR 28-APR-1999; 99US-0131445P.  
 PR 14-MAY-1999; 99US-0134287P.  
 PR 14-MAY-1999; 99WO-US010733.  
 PR 02-JUN-1999; 99WO-US012252.  
 PR 16-JUN-1999; 99US-0139557P.  
 PR 23-JUN-1999; 99US-0141037P.  
 PR 07-JUL-1999; 99US-0142680P.  
 PR 26-JUL-1999; 99US-0145698P.  
 PR 28-JUL-1999; 99US-0146222P.  
 PR 29-OCT-1999; 99US-0162506P.  
 PR 30-NOV-1999; 99WO-US028313.  
 PR 02-DEC-1999; 99WO-US028551.  
 PR 02-DEC-1999; 99WO-US028565.  
 PR 16-DEC-1999; 99WO-US030035.  
 PR 30-DEC-1999; 99WO-US031243.  
 PR 30-DEC-1999; 99WO-US031274.  
 PR 05-JAN-2000; 2000WO-US000219.  
 PR 06-JAN-2000; 2000WO-US000277.  
 PR 06-JAN-2000; 2000WO-US000376.  
 PR 11-FEB-2000; 2000WO-US000365.  
 PR 18-FEB-2000; 2000WO-US004341.  
 PR 24-FEB-2000; 2000WO-US005004.  
 PR 02-MAR-2000; 2000WO-US005841.  
 PR 10-MAR-2000; 2000WO-US006319.  
 PR 21-MAR-2000; 2000WO-US007532.  
 PR 30-MAR-2000; 2000WO-US008439.  
 PR 17-MAY-2000; 2000WO-US013705.  
 PR 22-MAY-2000; 2000WO-US014042.  
 PR 30-MAY-2000; 2000WO-US014941.  
 PR 02-JUN-2000; 2000WO-US015264.  
 PR 28-JUL-2000; 2000WO-US020710.  
 PR 24-AUG-2000; 2000WO-US023328.  
 PR 01-DEC-2000; 2000WO-US032678.  
 PR 20-DEC-2000; 2000WO-US034956.  
 PR 28-FEB-2001; 2001WO-US006520.  
 PR 22-MAR-2001; 2001WO-US009552.  
 PR 25-MAY-2001; 2001WO-US017092.  
 PR 01-JUN-2001; 2001WO-US017860.  
 PR 20-JUN-2001; 2001WO-US019692.  
 PR 29-JUN-2001; 2001WO-US021066.  
 PR 09-JUL-2001; 2001WO-US021735.  
 PR 30-JUL-2001; 2001US-00918585.  
 XX  
 PA (GETH ) GENENTECH INC.  
 XX  
 PI Ashkenazi AJ, Baker KP, Botstein D, Desnovers L, Eaton DL,  
 PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME,  
 PI Goddard A, Godowski PJ, Grimaldi JC, Gunney AL, Hillan KJ,  
 PI Kijavain IU, Kuo SS, Naylor MA, Pan J, Paoni NF, Roy MA, Shelton DL,  
 PI Stewart TA, Tumas D, Williams PM, Wood WI;

XX  
 DR WPI; 2004-090107/09.  
 XX  
 PT Novel secreted and transmembrane PRO polypeptides useful for treating  
 PT diabetes, kidney disorders (Berger disease, celiac disease), pericyte-  
 PT associated tumors, arthritis and cardiac insufficiency disorders.  
 XX  
 PS Example 114; SEQ ID NO 564; 458pp; English.  
 PS  
 XX  
 CC The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 94 fully defined sequences as given  
 CC in the specification (including PRO lacking its associated signal  
 CC peptide), a PRO extracellular domain with or without its associated signal  
 CC peptide). Also included are nucleic acids encoding the PRO proteins  
 CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
 CC comprising the vector and producing PRO, a chimeric molecule comprising  
 CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
 CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
 CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
 CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
 CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
 CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
 CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
 CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
 CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
 CC causes death of the cell. PRO337 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO4993 polypeptide. PRO725,  
 CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
 CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
 CC useful for linking a bioactive molecule to a cell expressing PRO725,  
 CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
 CC polypeptide is useful for modulating at least one biological activity of  
 CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
 CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
 CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,  
 CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
 CC modulating the biological activity of the cell expressing PRO1559  
 CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
 CC PRO739 polypeptide is useful for modulating the biological activity of  
 CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
 CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
 CC sports-related joint problems, articular cartilage defects,  
 CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
 CC mammals. The present sequence is a Taqman PCR probe used investigate PRO  
 CC gene amplification in certain tumour cell lines.  
 XX  
 SQ Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Oy 395 GGCGGAGGCGGAGGCTC 414  
 Db 20 GGCGGAGGCGCTTCAGGCTC 1  
 RESULT 394  
 ADAM17563/C  
 ID ADAM17563 standard; DNA; 21 BP.  
 XX  
 AC ADAM17563;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE Human PRO 362 Taqman PCR probe.  
 XX  
 KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
 KW ophthalmological; antiarthritis; osteopathic; antirheumatic; vulnary;  
 KW auditory; tumour growth; retinal disorder; sports-related joint problem;  
 KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
 KW wound healing; hearing loss; probe; in situ hybridisation.

XX Homo sapiens.  
OS  
XX US200404832-A1.  
PN  
XX  
XX 11-MAR-2004.  
PD  
PF 24-OCT-2001; 2001US-00999831.  
XX  
XX 29-APR-1998; 98US-0083545P.  
PR 08-MAR-1999; 99WO-US005028.  
PR 25-AUG-1999; 99US-00380138.  
PR 29-OCT-1999; 99US-0162506P.  
PR 02-DEC-1999; 99WO-US028551.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 30-JUL-2001; 2001US-00918585.  
XX  
XX (GETH ) GENENTECH INC.  
PA  
XX Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;  
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;  
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillen KJ;  
PI Kiyaviri IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;  
PI Stewart TA, Tumas D, Williams PM, Wood WI;  
XX  
XX MPI; 2004-238493/22.  
XX  
XX New secreted and transmembrane PRO polypeptides and nucleic acid  
PT molecules, useful in gene therapy, or for diagnosing and treating  
PT neoplastic cell growth and proliferation, diabetes or cardiac  
PT insufficiency disorders in mammals.  
XX  
XX Example 114; SEQ ID NO 564; 461pp; English.  
PS  
XX The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC to an amino acid sequence chosen from 94 fully defined sequences as given  
CC in the specification (including PRO lacking its associated signal  
CC peptide), a PRO extracellular domain with or without its associated signal  
CC peptide). Also included are nucleic acids encoding the PRO proteins  
CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
CC comprising the vector and producing PRO, a chimeric molecule comprising  
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
CC causes death of the cell. PRO337 polypeptide is useful for linking a  
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
CC useful for linking a bioactive molecule to a cell expressing PRO725,  
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
CC polypeptide is useful for modulating at least one biological activity of  
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,  
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
CC modulating the biological activity of the cell expressing PRO1559  
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-  
CC PRO739 polypeptide is useful for modulating the biological activity of  
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
CC sports-related joint problems, articular cartilage defects,  
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in  
CC mammals. The present sequence is a Taqman PCR probe used investigate PRO  
CC gene amplification in certain tumour cell lines.  
XX  
XX Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
DY 395 GGCGGAAGCCCCGAGGATC 414  
DB 20 GGCGGAGAGCCTTCAGGATC 1  
RESULT 395  
ADL07397/c  
ID ADL07397 standard; DNA; 21 BP.  
XX  
XX AC ADL07397;  
XX  
XX 17-JUN-2004 (first entry)  
XX  
XX Human PRO 362 Taqman PCR probe.  
XX  
XX Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytosolic;  
XX ophthalmological; antiarthritic; osteopathic; antirheumatic; vitreous;  
XX auditory; tumour growth; retinal disorder; sports-related joint problem;  
XX articular cartilage defects; osteoarthritis; rheumatoid arthritis;  
XX wound healing; hearing loss; probe; in situ hybridisation.  
XX  
XX Homo sapiens.  
XX  
XX US2004063921-A1.  
XX  
XX 01-APR-2004.  
XX  
XX 25-OCT-2001; 2001US-00013917.  
XX  
XX 17-MAR-1998; 98US-00040220.  
XX 26-JUN-1998; 98US-00105413.  
XX 07-OCT-1998; 98US-00168978.  
XX 07-OCT-1998; 98WO-US021141.  
XX 02-NOV-1998; 98US-00184216.  
XX 06-NOV-1998; 98US-00187368.  
XX 20-NOV-1998; 98WO-US024855.  
XX 07-DEC-1998; 98US-00202054.  
XX 22-DEC-1998; 98US-00218517.  
XX 05-JAN-1999; 99WO-US000106.  
XX 05-MAR-1999; 99US-00254465.  
XX 08-MAR-1999; 99WO-US005028.  
XX 10-MAR-1999; 99US-00265686.  
XX 12-MAR-1999; 99WO-US005190.  
XX 12-MAR-1999; 99US-00267213.  
XX 12-APR-1999; 99US-00284291.  
XX 14-MAY-1999; 99US-00311832.  
XX 14-MAY-1999; 99US-00380137.  
XX 14-MAY-1999; 99WO-US028551.  
XX 14-MAY-1999; 99WO-US010733.  
XX 02-JUN-1999; 99WO-US012252.  
XX 25-AUG-1999; 99US-00380138.  
XX 25-AUG-1999; 99US-00380142.  
XX 30-NOV-1999; 99WO-US028313.  
XX 02-DEC-1999; 99WO-US028551.  
XX 02-DEC-1999; 99WO-US028565.  
XX 16-DEC-1999; 99WO-US030095.  
XX 30-DEC-1999; 99WO-US031243.  
XX 30-DEC-1999; 99WO-US031274.  
XX 05-JAN-2000; 2000WO-US000219.  
XX 06-JAN-2000; 2000WO-US000277.  
XX 06-JAN-2000; 2000WO-US000376.  
XX 11-FEB-2000; 2000WO-US000356.  
XX 18-FEB-2000; 2000WO-US004341.  
XX 24-FEB-2000; 2000WO-US005004.  
XX 02-MAR-2000; 2000WO-US005841.  
XX 10-MAR-2000; 2000WO-US006319.  
XX 21-MAR-2000; 2000WO-US007532.  
XX 30-MAR-2000; 2000WO-US008439.  
XX 17-MAY-2000; 2000WO-US013705.

PR 22-MAY-2000; 2000WO-US014042.  
 PR 30-MAY-2000; 2000WO-US014941.  
 PR 02-JUN-2000; 2000WO-US015264.  
 PR 28-JUL-2000; 2000WO-US020710.  
 PR 24-AUG-2000; 2000WO-US023328.  
 PR 08-NOV-2000; 2000US-00709238.  
 PR 27-NOV-2000; 2000US-00723749.  
 PR 01-DEC-2000; 2000WO-US032678.  
 PR 20-DEC-2000; 2000US-00747259.  
 PR 20-DEC-2000; 2000WO-US034956.  
 PR 28-FEB-2001; 2001WO-US006520.  
 PR 22-MAR-2001; 2001US-00816744.  
 PR 22-MAR-2001; 2001US-00816920.  
 PR 22-MAR-2001; 2001WO-US009552.  
 PR 10-MAY-2001; 2001US-00854208.  
 PR 10-MAY-2001; 2001US-00854280.  
 PR 25-MAY-2001; 2001WO-US017092.  
 PR 01-JUN-2001; 2001US-00872035.  
 PR 01-JUN-2001; 2001WO-US017800.  
 PR 05-JUN-2001; 2001US-00874503.  
 PR 14-JUN-2001; 2001US-00882636.  
 PR 19-JUN-2001; 2001US-00886342.  
 PR 20-JUN-2001; 2001WO-US019692.  
 PR 29-JUN-2001; 2001WO-US021066.  
 PR 09-JUL-2001; 2001WO-US021735.  
 PR 30-JUL-2001; 2001US-00918585.  
 XX (GERTH ) GENENTECH INC.  
 XX Aekkenazi AJ, Baker KP, Borstein D, Desnoyers L, Eaton DL;  
 PI Ferrara N, Filvaroff E, Fong S, Gao W, Gebder H, Gerritsen ME;  
 PI Goddard A, Godowski PJ, Grimaldi JC, Gunney AL, Hillan KJ;  
 PI Kijavni IJ, Kuo SS, Napier MA, Pan J, Paothi NF, Roy MA, Shelton DL;  
 PI Stewart TA, Tumas D, Williams PM, Wood WI;  
 XX WPI; 2004-282524/26.  
 DR New PRO polynucleotides and polypeptides, used as molecular weight  
 PT markers and are useful in chromosome mapping and tissue typing and in  
 PT treating tumors.  
 XX  
 PS Example 114; SEQ ID NO 564; 464pp; English.  
 XX  
 CC The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 94 fully defined sequences as given  
 CC in the specification (including PRO lacking its associated signal  
 CC peptide, a PRO extracellular domain with or without its associated signal  
 CC peptide). Also included are nucleic acids encoding the PRO proteins  
 CC mentioned above, a vector comprising a PRO nucleic acid, a host cell  
 CC comprising the vector and producing PRO, a chimeric molecule comprising  
 CC PRO fused to a heterologous amino acid sequence, and an anti-PRO  
 CC antibody. PRO337 polypeptide is useful for detecting a PRO4993  
 CC polypeptide in a sample suspected of containing PRO4993 polypeptide.  
 CC Similarly, PRO4993 polypeptide is useful for detecting PRO337  
 CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting  
 CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting  
 CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive  
 CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule  
 CC causes death of the cell. PRO337 polypeptide is useful for linking a  
 CC bioactive molecule to a cell expressing PRO4993 polypeptide. PRO725,  
 CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule  
 CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is  
 CC useful for linking a bioactive molecule to a cell expressing PRO725,  
 CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337  
 CC polypeptide is useful for modulating at least one biological activity of  
 CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337  
 CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the  
 CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,  
 CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for  
 CC modulating the biological activity of the cell expressing PRO1559  
 CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-

CC PRO739 polypeptide is useful for modulating the biological activity of  
 CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The  
 CC polypeptides are useful for inhibiting tumour growth, retinal disorders,  
 CC sports-related joint problems, articular cartilage defects,  
 CC osteoarthritis or rheumatoid arthritis, wound healing and healing loss in  
 CC mammals. The present sequence is a Tagman PCR probe used investigate PRO  
 CC gene amplification in certain tumour cell lines.  
 XX  
 XX Sequence 21 BP; 3 A; 9 C; 6 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 1.1%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 395 GGCCTGAGCCCTCAGGCTC 414  
 Db 20 GCGCGAGGCTTCAGGCTC 1  
 RESULT 396  
 ADP86142/c  
 ID ADP86142 standard; DNA; 21 BP.  
 XX  
 AC ADP86142;  
 XX  
 DT 09-SEP-2004 (first entry)  
 XX  
 XX Cpg immunostimulatory oligonucleotide #13.  
 DE  
 XX Cpg immunostimulatory oligonucleotide; immune response; allergy; asthma;  
 KW viral infection; bacterial infection; cancer; lymphoma;  
 KW intraepithelial neoplasia; melanoma; neuroblastoma; Hodgkin's lymphoma;  
 KW carcinoma; sarcoma; gene therapy; phosphorothioate; ss.  
 XX  
 OS Unidentified.  
 OS  
 FH Key Location/Qualifiers  
 FT modified\_base 1..21  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone"  
 XX  
 XX WO2004051104-A2.  
 PN  
 XX 24-JUN-2004.  
 PD  
 XX 11-DEC-2003; 2003WO-US039775.  
 PF  
 XX 11-DEC-2002; 2002US-0432409P.  
 PR 25-SEP-2003; 2003US-0506108P.  
 PR  
 XX (COLE-) COLEY PHARM GROUP INC.  
 PA (COLE-) COLEY PHARM GMBH.  
 PI Kriegl AM, Jurk M, Vollmer J, Uhlmann E;  
 PI WPI; 2004-487902/46.  
 DR  
 XX New oligonucleotides, useful for treating allergy or asthma, viral and  
 PT bacterial infections, and cancer, e.g. biliary tract cancer, breast  
 PT cancer, cervical cancer.  
 PT  
 XX Example; SEQ ID NO 13; 104pp; English.  
 PS  
 CC The invention relates to a class of Cpg immunostimulatory  
 CC oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that  
 CC are useful for stimulating an immune response. Oligonucleotides and  
 CC compositions of the invention are useful for treating allergy or asthma,  
 CC viral and bacterial infections and cancer e.g. biliary tract cancer,  
 CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,  
 CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,  
 CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,  
 CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,

CC rectal cancer, sarcoma, thyroid cancer, renal cancer, bone cancer, brain  
CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,  
CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,  
CC testicular cancer, as well as other carcinomas and sarcomas. The  
CC invention is also useful in gene therapy. The present sequence is a CpG  
CC immunostimulatory oligonucleotide.  
XX  
SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;  
OY Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Db 1520 AAAAAAAAAAGTAAAGC 1539  
|||||  
21 AAAAAAAAAAAAAAAAAAGC 2  
RESULT 397  
ADQ03034/C  
ID ADQ03034 standard; DNA; 21 BP.  
XX  
AC ADQ03034;  
XX  
DT 09-SEP-2004 (first entry)  
XX  
DE ALDH2 A type detection primer SEQ ID NO:20.  
XX  
KW polymerase chain reaction clamping; PCR clamping; detection;  
KW single nucleotide polymorphism; SNP; peptide nucleic acid probe;  
KW PNA probe; mutation; aldehyde dehydrogenase II; ALDH2; primer; ss.  
XX  
OS Synthetic.  
XX  
PN JP2004173623-A.  
PD  
PD 24-JUN-2004.  
XX  
PF 28-NOV-2002; 2002JP-00345136.  
XX  
PR 28-NOV-2002; 2002JP-00345136.  
XX  
PA (NIFL-) NIPPON FLOUR MILLS CO LTD.  
XX  
DR WPI; 2004-492192/47.  
XX  
PT Polymerase chain reaction clamping for improved detection of the presence  
PT of single nucleotide polymorphisms in a target gene, comprises using a  
PT peptide nucleic acid probe, and a primer set containing lower and upper  
PT primers.  
XX  
PS Example 4; SEQ ID NO 20; 40pp; Japanese.  
XX  
XX The present invention describes a polymerase chain reaction (PCR)  
CC clamping method (M1), which can be used for detecting the presence of  
CC single nucleotide polymorphisms (SNPs) in a target gene. (M1) comprises:  
CC (a) using a peptide nucleic acid (PNA) probe having a reverse  
CC complementary strand sequence of a partial sequence containing one or  
CC more base mutations in the sense or antisense strand of a wild-type or a  
CC mutant target DNA; (b) a primer set containing a lower primer having a  
CC reverse complementary strand sequence of a partial sequence containing  
CC one or more mutations in the sense strand of a mutant or a wild-type  
CC target DNA or a partial sequence of a vicinity like the one base mutation  
CC and an upper primer having a reverse complementary strand sequence of a  
CC partial sequence containing one or more mutations in the antisense strand  
CC of a mutant or a wild-type target DNA or a partial sequence of a vicinity  
CC like the one base mutation; and (c) a further lower or upper primer  
CC having a reverse complementary strand sequence of a partial sequence in  
CC the 3' region of the partial sequence containing one or more mutations in  
CC the sense or antisense strand of a mutant or a wild-type target DNA. (M1)  
CC is useful for detecting the presence of SNPs in a target gene. (M1) is  
CC highly sensitive and accurate in detecting the presence of SNPs in a  
CC target gene. The present sequence represents a primer used in an aldehyde

CC dehydrogenase II (ALDH2) A type detection, which is used in the  
CC exemplification of the present invention.  
XX  
SQ Sequence 21 BP; 4 A; 5 C; 4 G; 8 T; 0 U; 0 Other;  
OY Query Match 1.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Db 788 TGCAGGTATATACGAAGTG 807  
|||||  
21 TGCAGGCATACCTAAAGTG 2  
RESULT 398  
AAH39959  
ID AAH39959 standard; DNA; 25 BP.  
XX  
AC AAH39959;  
XX  
DT 14-AUG-2001 (first entry)  
XX  
DE SNP specific SNPE primer SEQ ID 2755.  
XX  
KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;  
KW SNPE; genotyping; agammaglobulinemia; diabetes insipidus; cancer;  
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;  
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;  
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;  
KW inflammation; forensic investigation; paternity analysis; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200129262-A2.  
XX  
PD 26-APR-2001.  
XX  
PF 13-OCT-2000; 2000WO-US028436.  
XX  
PR 15-OCT-1999; 99US-0160096P.  
XX  
PA (ORCH-) ORCHID BIOSCIENCES INC.  
XX  
PI Picoult-Newburg L, Pohl M;  
XX  
DR WPI; 2001-290930/30.  
XX  
PT New genotyping oligonucleotide, useful for detecting the presence,  
PT absence or identity of single polynucleotide polymorphism in a nucleic  
PT acid sample.  
XX  
PS Claim 1; Page 64; 83pp; English.  
XX  
XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
CC primer extension (SNPE) primers, and the sequences of regions flanking  
CC sites of single nucleotide polymorphisms SNPs. The present invention  
CC includes kits for determining the presence or absence of a SNP, using the  
CC oligonucleotides of the invention. The PCR primers are used to amplify a  
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
CC The oligonucleotides are useful for genotyping a nucleic acid sample by  
CC performing a single-nucleotide primer extension reaction. The  
CC oligonucleotides are useful for determining the presence, absence or  
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to  
CC assess by association analysis the genotype of an individual or group of  
CC individuals, having a pathological phenotypic trait suspected of being  
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.  
CC agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,  
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
CC traits also include symptoms of or susceptibility to multifactorial  
CC diseases of which a component is or may be genetic such as autoimmune  
CC diseases, including, rheumatoid arthritis, multiple sclerosis,  
CC inflammation, cancer, nervous system diseases and infection by pathogenic



```
DT 11-JUN-2003 (first entry)
XX
DE Huntington's disease exon 1 triplet repeat sequence.
XX
KW Huntington's disease; neurotropic; anticonvulsant; huntingtin; human;
XX gene therapy; ss.
XX
OS Homo sapiens.
XX
PN WO2003013437-A2.
XX
PD 20-FEB-2003.
XX
PF 07-AUG-2002; 2002WO-US025352.
XX
PR 07-AUG-2001; 2001US-0310757P.
XX
PR 08-AUG-2001; 2001US-0310770P.
XX
PR 08-AUG-2001; 2001US-0310889P.
XX
PR 04-DEC-2001; 2001US-0337219P.
XX
PA (UYDE ) UNIV DELAWARE.
XX
PI Kmlec EB, Parekh-Olmedo H;
XX
DR WPI; 2003-256478/25.
XX
XX
XX New single stranded oligonucleotides comprising a DNA domain having at
PT least one mismatch with respect to the genetic sequence of the
PT Huntington's disease gene to be altered, useful for treating or
PT preventing Huntington's disease.
XX
PS Example 2; Page 61; 133pp; English.
XX
CC The present sequence is an example of a poly-glutamine triplet repeat
CC region found in exon 1 of the Huntington's disease (HD) gene. In an
CC example from the invention, neuronal PC12 cells were engineered to
CC include an HD gene exon 1 containing this sequence. These cells were used
CC to demonstrate the ability of a single-stranded, phosphorothioate-
CC modified oligonucleotide, HDA37/53 (see AB261736) having a mismatch with
CC respect to the HD gene, to convert a CAG triplet to CTG in HD gene exon
CC 1, and to reduce the formation of Huntington's protein (huntingtin)
CC aggregates. HDA37/53 is an example of oligonucleotides of the invention
CC that target sequence alterations to the triplet repeat region of the HD
CC gene, and which can be used for the treatment or prevention of HD
XX
SQ Sequence 17 BP; 9 A; 5 C; 3 G; 0 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4,7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 725 TTGCTGTGCTGCTG 739
DB 17 TTGCTGTGCTGCTG 3
XX
RESULT 402
ADC37821/C
ID ADC37821 standard; DNA; 17 BP.
XX
AC ADC37821;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:170.
XX
KW human; angiotomtin-like protein 1; AMLP1; cytosstatic; gene therapy;
XX AMLP1a; ss.
XX
OS Synthetic.
XX
OS Homo sapiens.
XX
PN WO2003037931-A2.
```

```
XX
PD 08-MAY-2003.
XX
PP 01-NOV-2002; 2002WO-US035129.
XX
PR 01-NOV-2001; 2001US-0334773P.
XX
PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
PI Shannon M, Phan T;
XX
DR WPI; 2003-430501/40.
XX
XX
XX New isolated nucleic acid molecule encoding a human angiotomtin-like
PT protein, useful for treating or preventing a disorder associated with
PT decreased or increased expression or activity of AMLP1.
XX
PS Example 2; SEQ ID NO 170; 172pp; English.
XX
CC The present invention describes the human angiotomtin-like protein 1
CC (AMLP1). human AMLP1 has cytosstatic activity, and can be used in gene
CC therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and
CC compositions of the present invention can be used for treating or
CC preventing a disorder associated with decreased or increased expression
CC or activity of AMLP1. The present sequence represents a scanning
CC oligonucleotide for human AMLP1a, which is used in an example from the
CC present invention.
XX
SQ Sequence 17 BP; 6 A; 6 C; 5 G; 0 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4,7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 726 TGCTGTGCTGCTGC 740
DB 15 TGCTGTGCTGCTGC 1
XX
RESULT 403
ADC37819/C
ID ADC37819 standard; DNA; 17 BP.
XX
AC ADC37819;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:168.
XX
KW human; angiotomtin-like protein 1; AMLP1; cytosstatic; gene therapy;
XX AMLP1a; ss.
XX
OS Synthetic.
XX
OS Homo sapiens.
XX
PN WO2003037931-A2.
XX
PD 08-MAY-2003.
XX
PP 01-NOV-2002; 2002WO-US035129.
XX
PR 01-NOV-2001; 2001US-0334773P.
XX
PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
PI Shannon M, Phan T;
XX
DR WPI; 2003-430501/40.
XX
XX
XX New isolated nucleic acid molecule encoding a human angiotomtin-like
PT protein, useful for treating or preventing a disorder associated with
PT decreased or increased expression or activity of AMLP1.
XX
```

```
PS Example 2; SEQ ID NO 168; 172bp; English.
XX
CC The present invention describes the human angiomotin-like protein 1
CC (AMLPI). human AMLPI has cytoskeletal activity, and can be used in gene
CC therapy. The AMLPI protein, nucleic acid molecules, antibodies, and
CC compositions of the present invention can be used for treating or
CC preventing a disorder associated with decreased or increased expression
CC or activity of AMLPI. The present sequence represents a scanning
CC oligonucleotide for human AMLPIa, which is used in an example from the
CC present invention.
XX
SQ Sequence 17 BP; 7 A; 6 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 726 TGCTGTTGCTGCTGC 740
Db 17 TGCTGTTGCTGCTGC 3

RESULT 404
ADC37820/C
ID ADC37820 standard; DNA; 17 BP.
XX
AC ADC37820;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human AMLPIa scanning 17-mer oligonucleotide SEQ ID NO:169.
XX
KM human; angiomotin-like protein 1; AMLPI; cytoskeletal; gene therapy;
KM AMLPIa; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003037931-A2.
XX
PD 08-MAY-2003.
XX
PF 01-NOV-2002; 2002WO-US035129.
XX
PR 01-NOV-2001; 2001US-0334773P.
XX
PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
PI Shannon M; Phan T;
XX
DR WPI; 2003-430501/40.
XX
PT New isolated nucleic acid molecule encoding a human angiomotin-like
PT protein, useful for treating or preventing a disorder associated with
PT decreased or increased expression or activity of AMLPI.
XX
PS Example 2; SEQ ID NO 169; 172bp; English.
XX
CC The present invention describes the human angiomotin-like protein 1
CC (AMLPI). human AMLPI has cytoskeletal activity, and can be used in gene
CC therapy. The AMLPI protein, nucleic acid molecules, antibodies, and
CC compositions of the present invention can be used for treating or
CC preventing a disorder associated with decreased or increased expression
CC or activity of AMLPI. The present sequence represents a scanning
CC oligonucleotide for human AMLPIa, which is used in an example from the
CC present invention.
XX
SQ Sequence 17 BP; 7 A; 5 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
QY 726 TGCTGTTGCTGCTGC 740
Db 16 TGCTGTTGCTGCTGC 2

RESULT 405
AAH19623/C
ID AAH19623 standard; DNA; 18 BP.
XX
AC AAH19623;
XX
DT 31-JUL-2001 (first entry)
XX
DE Oligonucleotide containing a mixture of CAG/CAA codons.
XX
KM Polyglutamine region; polypeptide aggregation; aggregation disruption;
KM Huntington's disease; Alzheimer's disease; Parkinson's disease;
KM spinocerebellar ataxia; multiple myeloma; amyloidosis; anticonvulsant;
KM spongiform encephalopathy; neuroprotective; nootropic; antiparkinsonian;
KM ss.
XX
OS Synthetic.
OS
PN WO200123412-A2.
XX
PD 05-APR-2001.
XX
PF 27-SEP-2000; 2000WO-US041008.
XX
PR 27-SEP-1999; 99US-00405048.
XX
PA (MAST ) MASSACHUSETTS INST TECHNOLOGY.
XX
PI Housman DE, Preisinger EA, Kazantsev AG;
XX
DR WPI; 2001-300097/31.
XX
PT Screening for agents which disrupt aggregation of polypeptides for
PT treating aggregation-associated disorders e.g. Alzheimer's disease, by
PT using aggregation-disposed polypeptides or cell expressing the
PT polypeptides.
XX
PS Example 1; Page 25; 42pp; English.
XX
CC The present sequence was used to generate a polypeptide with extended
CC polyglutamine regions. This was performed in an example illustrating a
CC method for identifying a compound which disrupts polypeptide aggregation.
CC The method is carried out using a cell which has been genetically
CC modified to express aggregation-disposed polypeptides, or using purified
CC aggregation-disposed polypeptides. The compounds identified by this
CC method are useful for treating disorders associated with such polypeptide
CC aggregation, including Huntington's disease, Alzheimer's disease,
CC Parkinson's disease, spinocerebellar ataxia, multiple myeloma,
CC amyloidosis, and spongiform encephalopathies like Creutzfeldt-Jakob
CC disease and kuru in humans. The present sequence was annealed to its
CC complement to generate double stranded duplex DNA with trinucleotide
CC extensions
XX
SQ Sequence 18 BP; 9 A; 6 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 15; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 725 TTGCTGTTGCTGCTG 739
Db 18 TTGCTGTTGCTGCTG 4

RESULT 406
ABK11198/C
ID ABK11198 standard; DNA; 18 BP.
```



AC	ABK1198;
XX	
DT	05-JUN-2002 (first entry)
DE	Oligonucleotide #1 used to generate DNA with trinucleotide extensions.
XX	
KM	Inhibition of protein-protein interaction; Alzheimer's disease;
KM	polyglutamine-containing transcription factor; hexamerisation of p53;
KM	homodimerisation of Jun; expanded trinucleotide repeat; CAG repeat;
KM	Huntington's disease; HD; primate and bulbar muscular atrophy; SBMA;
KM	dentatorubral-pallidoluysian atrophy; spinocerebellar ataxia type 1;
KM	spinocerebellar ataxia type 2; spinocerebellar ataxia type 6;
KM	spinocerebellar ataxia type 7; Machado-Joseph disease; MJD/SCA3;
XX	neotropic; anticonvulsant; cerebroprotective; neuroprotective; ss.
OS	Synthetic.
XX	
PN	MO200216644-A1.
XX	
PD	28-FEB-2002.
XX	
PF	20-AUG-2001; 2001MO-US026097.
PR	18-AUG-2000; 2000US-0226502P.
XX	
PA	(MASI ) MASSACHUSETTS INST TECHNOLOGY.
XX	
PI	Kazantsev A, Thompson L, Housman DE;
DR	WPI: 2002-280948/32.
XX	
PT	Novel agent for inhibiting protein-protein interaction useful to treat
PT	Alzheimer's disease, has two domains which bind first, second proteins
PT	with seven consecutive glutamine residues and a domain separating two
PT	domains.
PS	Disclosure; Page 8; 40pp; English.
XX	
CC	The present invention relates to therapeutic agents comprising a first
CC	domain (D1) that binds a protein having at least seven consecutive
CC	glutamine (Glu) residues, a second domain (D2) that binds another protein
CC	having at least 7 consecutive Glu residues, and a third domain (D3) that
CC	separates D1 from D2. The therapeutic agents of the invention are useful
CC	for inhibiting protein-protein interactions (e.g. aggregation,
CC	dimerisation or other physiologically significant association), and can
CC	be used for treating Alzheimer's disease, and disorders in which
CC	polyglutamine-containing transcription factors or coactivators are
CC	desirably active (e.g. disorders associated with homodimerisation of Jun
CC	or hexamerisation of p53. The therapeutic agents can also be used to
CC	treat various disorders, including those associated with expanded
CC	trinucleotide (CAG) repeats. For example such disorders can include
CC	Huntington's disease (HD), primate and bulbar muscular atrophy (SBMA),
CC	dentatorubral-pallidoluysian atrophy, spinocerebellar ataxia type 1, type
CC	2, type 6 or type 7, or Machado-Joseph disease (MJD/SCA3). The present
CC	invention represents an oligonucleotide used to generate double stranded
CC	DNA with trinucleotide extensions
XX	
SO	Sequence 18 BP; 9 A; 6 C; 3 G; 0 T; 0 U; 0 Other;
QY	Query Match 1.1%; Score 15; DB 1; Length 18;
DB	Best Local Similarity 100.0%; Pred. No. 4.4e+02;
	Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
	725 TTGCTGTGCGCTG 739
	18 TTGCTGTGCGCTG 4
RESULT 407	
ID	AB281759/C
XX	AB281759 standard; DNA; 18 BP.
XX	AB281759;

XX	11-JUN-2003	(first entry)
DT	Huntington's disease exon 1 triplet repeat sequence.	
DE	Huntington's disease; neurotropic; anticonvulsant; huntingtin; human;	
XX	gene therapy; ss.	
KM	Homo sapiens.	
XX	MO2003013437-A2.	
OS	20-FEB-2003.	
XX	07-AUG-2002; 2002MO-US025352.	
PD	07-AUG-2001; 2001US-0310757P.	
XX	08-AUG-2001; 2001US-0310770P.	
PR	08-AUG-2001; 2001US-0310889P.	
PR	04-DEC-2001; 2001US-0337219P.	
XX	(UYDE ) UNIV DELAWARE.	
XX	Kmiec EB, Parekh-Olmado H;	
PI	WPI; 2003-256478/25.	
DR	New single stranded oligonucleotides comprising a DNA domain having at	
PT	least one mismatch with respect to the genetic sequence of the	
PT	Huntington's disease gene to be altered, useful for treating or	
PT	preventing Huntington's disease.	
XX	Example 5; Page 72; 133pp; English.	
PS	The present sequence is an example of a poly-glutamine triplet repeat	
XX	region found in exon 1 of the Huntington's disease (HD) gene. In an	
CC	example from the invention, neuronal PC12 cells were engineered to	
CC	include an HD gene exon 1 containing this sequence. These cells were used	
CC	to demonstrate the ability of single-stranded chemically-modified	
CC	oligonucleotides (see AB281747-51) to decrease the formation of	
CC	Huntington's protein (huntingtin) aggregates in cell culture. The	
CC	invention provides chemically modified oligonucleotides that target	
CC	sequence alterations to the triplet repeat region of the HD gene exon 1	
CC	and/or which reduce the formation of huntingtin protein-containing	
CC	aggregates. These are useful for the treatment or prevention of HD	
XX	Sequence 18 BP; 9 A; 6 C; 3 G; 0 T; 0 U; 0 Other;	
SO	Query Match 1.1%; Score 15; DB 1; Length 18;	
	Best local Similarity 100.0%; Pred. No. 4.4e+02;	
	Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	725 TTGCTTTTGCTGCTG 739	
DB	18 TTGCTTTTGCTGCTG 4	
RESULT 408	ADK67650/C	
ID	ADK67650 standard; DNA; 18 BP.	
XX	ADK67650;	
XX	06-MAY-2004 (first entry)	
DT	Huntington's disease gene exon 1 DNA fragment.	
DB	Huntington's disease; huntingtin; protein aggregation; gene therapy;	
XX	human; de.	
XX	Homo sapiens.	
OS	MO2004014306-A2.	
XX		

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XX 19-FEB-2004.
PD
XX 07-AUG-2003; 2003WO-US024868.
PF
XX 07-AUG-2002; 2002US-0402198P.
PR
XX (UYDE ) UNIV DELAMARE.
PA
XX Kmiec EB, Parekh-Olmedo H;
PI
XX WPI; 2004-180536/17.
DR
XX
XX Identifying the oligonucleotide species that disrupts aggregation of a
PT protein aggregant in a cell by introducing the oligonucleotide species or
PT composition separately into cells that have or are likely to develop
PT aggregation.
PS
XX Example 1; Page 26; 59pp; English.
XX
XX The present sequence is that of a fragment of exon 1 of the Huntington's
CC disease (HD) gene comprising alternating repeating codons for Gln. A
CC fusion gene comprising HD gene exon 1 and an enhanced green fluorescent
CC protein gene was used in examples from the invention investigating the
CC ability of different oligonucleotides to reduce protein aggregation in
CC PC12 cells containing integrated copies of the fusion gene. The invention
CC is based on the discovery that oligonucleotides unrelated in sequence to
CC that of a nucleic acid which encodes a protein aggregant can be effective
CC in disrupting or preventing aggregation in disorders of protein assembly.
CC A claimed method for identifying, from a plurality of oligonucleotides
CC differing in sequence and/or composition, those oligonucleotide species
CC that disrupt aggregation of a protein aggregant in a cell, comprises
CC introducing the oligonucleotides separately into cells that have or are
CC likely to develop protein aggregates, and identifying those that are
CC effective at preventing, reducing or disrupting aggregation. The
CC oligonucleotides are useful for treating a disorder of protein assembly
CC such as HD, Alzheimer's disease, cystic fibrosis, amyotrophic lateral
CC sclerosis, Parkinson's disease, spinobulbar muscular atrophy,
CC spinocerebellar ataxia types 1, 2, 3, 6 and 7, dentatorubral-
CC pallidolysian atrophy, prion diseases, scrapie, bovine spongiform
CC encephalopathy, Creutzfeldt-Jacob disease, new variant CJD, Pick's
CC disease, diabetes type II, multiple myeloma-plasma cell dyscrasia,
CC medullary carcinoma of the thyroid, chronic renal failure, congestive
CC heart failure, chronic inflammation, atherosclerosis (apoA) or familial
CC amyloidosis.
XX
SQ Sequence 18 BP; 9 A; 6 C; 3 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 15; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 725 TTGCGTGTGCTGCG 739
Db 18 TTGCTGTTGCTGCTG 4

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OS Mentha spicata.
XX
XX WO9859042-A1.
PN
XX 30-DEC-1998.
PD
XX 15-JUN-1998; 98WO-US012581.
PF
XX 24-JUN-1997; 97US-00881784.
PR
XX (UNIW ) UNIV WASHINGTON STATE RES FOUND.
PA
XX
XX Croteau RB, Lupien SL, Karp F;
PI
XX WPI; 1999-105618/09.
DR
XX
XX New isolated limonene hydroxylase nucleic acids - which encode limonene-6
PT -hydroxylase and limonene-3-hydroxylase, which can be used to produce
PT trans-carveol and trans-isopiperitenol.
PS
XX Example 4; Page 27; 80pp; English.
XX
XX The invention relates to nucleotide sequences encoding spearmint (-)-
CC limonene-6-hydroxylase (L6H) and peppermint (-)-limonene-3- hydroxylase
CC (L3H). Host cells containing a vector comprising the nucleotide sequences
CC can be used for the recombinant production of limonene hydroxylases or of
CC primary enzyme products. The primary enzyme products are trans-carveol in
CC the case of (-)-L6H or trans-isopiperitenol in the case of (-)-L3H, which
CC are of subsequent use, to obtain enhanced expression of limonene
CC hydroxylase in plants to attain enhanced trans- carveol or trans-
CC isopiperitenol production as a predator or pathogen defense mechanism,
CC attractant or environmental signal. The limonene hydroxylase cDNAs also
CC provide a useful tool for isolating other monoterpene hydroxylase genes
CC and for examining the developmental regulation of monoterpene
CC biosynthesis. Sequences AA06564-73 represent primers for the PCR
CC amplification of (-)-limonene-6-hydroxylase cDNA
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 1.1%; Score 15; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 4.2e+02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAATAAATAAAGTAAA 1537
Db 19 TAAATAAATAAATAA 1

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RESULT 409
AA06572/C
ID AA06572 standard; DNA; 19 BP.
XX
XX AA06572;
AC
XX 06-APR-1999 (first entry)
DT
XX (-)-limonene-6-hydroxylase primer 3.B.
DE
XX
XX (-)-limonene-6-hydroxylase; (-)-limonene-3-hydroxylase; L3H; L6H;
KM spear mint; peppermint; enzyme; limonene hydroxylase; trans-carveol;
KM trans-isopiperitenol; pathogen defense mechanism; attractant;
KM environmental signal; monoterpene hydroxylase; PCR primer; ss.
XX
OS Synthetic.

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RESULT 410
AA299489/C
ID AA299489 standard; DNA; 19 BP.
XX
XX AA299489;
AC
XX 03-JUL-2000 (first entry)
DT
XX
XX Primer HOOK for cDNA encoding a C-20 oxidase polypeptide.
DE
XX
XX Gibberellin acid; copalyl diphosphate synthase; 3beta-hydroxylase;
KM 2-oxidase; phytoene synthase; C-20 oxidase; 2beta,3beta-hydroxylase;
KM seed germination; seedling growth; gibberellin biosynthetic pathway;
KM transgenic plant; hypocotyl; epicotyl; PCR primer; ss.
XX
XX Cucurbita maxima.
OS
XX
XX WO200009722-A2.
PN
XX
XX 24-FEB-2000.
PD
XX
XX 10-AUG-1999; 99WO-US018066.
PF
XX 10-AUG-1998; 98US-0096111P.
PR
XX 07-JUN-1999; 99US-0137977P.

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XX (MONS ) MONSANTO CO.
PA
XX Brown SM, Ellich TD, Heck GR, Kishore GM, Logueach EW, Logueach SJ,
PI Piller KU, Rao S, Ream JE;
XX WPI; 2000-224351/19.
DR
XX Obtaining transgenic plant useful for controlling seed germination and
PT seedling growth comprises transgene comprising a sequence expressing
PT altered levels of an essential hormone.
XX
PS Example 17; Page 262; 267pp; English.
XX
CC The present primer was used to reverse transcribe cDNA encoding a C-20
CC oxidase. The amplifie fragment is used in the method of the invention.
CC The specification describes methods for the inhibition and control of
CC gibberellic acid levels. Gibberellic acid levels may be inhibited or
CC controlled by use of a chimeric expression construct expressing a RNA or
CC protein which suppresses the gibberellin biosynthetic pathway sequence,
CC divers substrate from the pathway, or degrades pathway substrates or
CC products. The methods uses copalyi diphosphate synthase, 3beta-
CC hydroxylase, 2-oxidase, phytoene synthase, C-20 oxidase, and a
CC 3beta,3beta-hydroxylase polynucleotides to achieve this. The method is
CC used to control seed germination and seedling growth especially to
CC regulate gene products of gibberellin biosynthetic pathway and
CC restoration of normal seed germination, in transgenic plants. The plants
CC produced are gibberellin deficient, and have shortened hypocotyl and/or
CC epicotyl phenotypes compared to normal plants
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match 1.1%; Score 15; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 4.2e+02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAGTAAAA 1537
DB 19 BAAAAAAGTAAAA 1
XX
RESULT 411
AADI5201/C
ID AADI5201 standard; DNA; 19 BP.
XX
AC AADI5201;
XX
DT 01-NOV-2001 (first entry)
XX
DE 3' sequencing primer #1 to identify and characterise polynucleotides.
XX
KW Fatty lesion development; atherosclerosis; Alzheimer's disease;
KW nervous system disorder; Parkinson's disease; immune system disorder;
KW ischaemia; lymphopaenia; leukocyte adhesion deficiency syndrome;
KW haemoglobinuria; anaemia; hyperproliferative disorder; Gaucher's disease;
KW coagulation disorder; blood platelet disorder; autoimmune disorder;
KW dermatitis; herpes simplex; Addison's disease; rheumatoid arthritis;
KW Grave's disease; gene therapy; antiarteriosclerotic; immunostimulant;
KW cardiovascular; antiviral; primer; ss.
XX
OS Unidentified.
XX
WO200154651-A2.
XX
XX 02-AUG-2001.
XX
XX 25-JAN-2001; 2001WO-US002439.
XX
XX 25-JAN-2000; 2000US-0177963P.
XX
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
PI Leonard A, Sartani A, Glass JR, Sutcliffe JG, Hasel KW;
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XX WPI; 2001-514526/56.
DR
XX New polynucleotides regulated by fatty lesion development and their
PT encoded polypeptides, useful for preventing, treating or ameliorating
PT atherosclerosis, as well as for immune or hyperproliferative disorders.
XX
PS Example 1; Page 79; 188pp; English.
XX
CC The present invention relates to an isolated nucleic acid regulated by
CC fatty lesion development, which comprises any of 55 polynucleotide
CC sequences from Oryctolagus cuniculus. The polynucleotide, polypeptide or
CC antibody is useful for preventing, treating, modulating or ameliorating a
CC medical condition, particularly atherosclerosis. The invention is used as
CC a marker or detector of nervous system disorder or disease (e.g.
CC Parkinson's disease, Alzheimer's disease, ischaemia, dementia). The
CC invention may also be useful for treating deficiencies or disorders of
CC the immune system (e.g. lymphopaenia, leukocyte adhesion deficiency
CC syndrome or haemoglobinuria, anaemia), hyperproliferative disorders
CC (e.g. Gaucher's disease), infectious disease (e.g. herpes simplex),
CC coagulation disorders, blood platelet disorders and autoimmune disorders
CC (Addison's disease, rheumatoid arthritis, dermatitis, Grave's disease).
CC The polynucleotide sequence is also used in gene therapy. The present
CC sequence is a 3' sequencing primer used in the identification and
CC characterisation of polynucleotides up-regulated by fatty lesion
CC development
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match 1.1%; Score 15; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 4.2e+02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAGTAAAA 1537
DB 19 BAAAAAAGTAAAA 1
XX
RESULT 412
AAH21968/C
ID AAH21968 standard; DNA; 19 BP.
XX
AC AAH21968;
XX
DT 16-AUG-2001 (first entry)
XX
DE Mouse total gene expression analysis (TOGA) 3' sequencing primer SEQ.92.
XX
KW Mouse; human; total gene expression analysis; TOGA; DST; EST;
KW digital sequence tag; expressed sequence tag; neuroleptic; antimanic;
KW central nervous system antidepressant; gene therapy; diagnosis;
KW neuropsychiatric disorder; schizophrenia; bipolar disorder;
KW addiction-related behaviour; chromosome identification; immune response;
KW PCR primer; probe; ss.
XX
OS Mus musculus.
XX
WO200130972-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029690.
XX
XX 26-OCT-1999; 99US-0161379P.
XX
XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
PI Thomas EA, Sutcliffe JG, Pribyl TM, Hilpish B, Hasel KW;
XX
XX WPI; 2001-300499/31.
XX
PT New neuroleptic-regulated polynucleotides expressed in the central
PT nervous system for diagnosing and treating neuropsychiatric disorders
```

PT such as schizophrenia, bipolar disorder and addiction-related behavior.  
 XX  
 PS Example 1; Page 87; 210pp; English.  
 CC The present invention describes isolated neuroleptic-regulated nucleic  
 CC acid molecules. (I) have neuroleptic, antimanic and antidepressant  
 CC activities, and can be used in gene therapy. (I), polypeptides (II)  
 CC encoded by (I), or a host cell (III) comprising (I), are useful for  
 CC preventing, treating, modulating or ameliorating a medical condition such  
 CC as a neuropsychiatric disorder. (I) are useful as diagnostic agents for  
 CC diagnosing a pathological condition or susceptibility to a pathological  
 CC condition such as neuropsychiatric disorder e.g. schizophrenia, a bipolar  
 CC disorder or addiction-related behaviour. (I) are useful for detecting the  
 CC presence of a nucleic acid encoding a protein in a mammalian tissue  
 CC sample. (I) can be used as probes and primers, for chromosome  
 CC identification, to control gene expression through triple helix formation  
 CC or antisense DNA or RNA, in gene therapy to treat the above mentioned  
 CC disorders, identifying individuals from minute biological samples, as an  
 CC alternative to restriction fragment length polymorphism (RFLP) and as  
 CC polymorphic markers for forensic purposes. (I) is also useful as  
 CC molecular weight markers on Southern gels, diagnostic probes for the  
 CC presence of specific mRNA in a particular cell type, as a probe to  
 CC subtract-out known sequences in the process of discovering novel  
 CC polynucleotides, for selecting and making oligomers for attachment to a  
 CC gene chip or other support, to raise anti-DNA antibodies using DNA  
 CC immunisation technique, and as an antigen to elicit an immune response.  
 CC AAH21877 to AAH21984, AAB98083 and AAB98084 represent sequences used in  
 CC the exemplification of the present invention  
 XX  
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;  
 Query Match 1.1%; Score 15; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 4.2e+02;  
 Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
 Oy 1519 TAAAAAAGTAAAA 1537  
 Db 19 BAAAAAAGTAAAAA 1  
 RESULT 413  
 AAF76617/C  
 ID AAF76617 standard; DNA; 19 BP.  
 AC AAF76617;  
 XX  
 DT 15-MAY-2001 (first entry)  
 DE Spearmlnt (-)-limonene-6-hydroxylase PCR primer SEQ ID NO: 18.  
 XX  
 KW Spearmlnt; peppermint; (-)-limonene-6-hydroxylase;  
 KW (-)-limonene-3-hydroxylase; flavour; aroma; probe; PCR primer; ss.  
 XX  
 OS Mentha spicata.  
 XX  
 PN US6194185-B1.  
 PD 27-FEB-2001.  
 XX  
 PF 14-APR-1999; 99US-00292768.  
 XX  
 PR 24-JUN-1997; 97US-00881784.  
 XX  
 PA (UNIM ) UNIV WASHINGTON STATE RES FOUND.  
 XX  
 PI Croteau RB, Lupien SL, Karp F;  
 XX  
 DR WPI; 2001-243405/25.  
 XX  
 PT Novel isolated limonene hydroxylase encoding nucleic acid molecule,  
 PT useful for altering production of limonene-6-hydroxylase or limonene-3-  
 PT hydroxylase in suitable host cell.  
 XX

PS Example 4; Col 55; 57pp; English.  
 XX  
 CC The present invention provides the protein and coding sequences of the  
 CC peppermint and spearmint (-)-limonene-3-hydroxylase and the spearmint (-)  
 CC -limonene-6-hydroxylase. Also provided are a number of probes and PCR  
 CC primers which were used to isolate the sequences. These are useful in the  
 CC production of transgenic plants with altered flavour and aroma  
 XX  
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;  
 Query Match 1.1%; Score 15; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 4.2e+02;  
 Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
 Oy 1519 TAAAAAAGTAAAA 1537  
 Db 19 BAAAAAAGTAAAAA 1  
 RESULT 414  
 AAF62495/C  
 ID AAF62495 standard; DNA; 19 BP.  
 AC AAF62495;  
 XX  
 DT 10-DEC-2001 (first entry)  
 DE T solium 10Kda antigen coding sequence PCR primer #1.  
 XX  
 KW 10Kda antigen; immunodiagnosis; neurological disease; parasite;  
 KW neurocysticercosis disease; PCR primer; ss.  
 XX  
 OS Taenia solium.  
 XX  
 PN WO200125424-A1.  
 PD 12-APR-2001.  
 XX  
 PF 30-SEP-2000; 2000WO-1B001396.  
 XX  
 PR 01-OCT-1999; 99US-0157388P.  
 XX  
 PA (KONG/) KONG Y.  
 PA (CHUN/) CHUNG J.  
 PA (BAHK/) BAHK Y Y.  
 PA (KANG/) KANG S.  
 PA (CHOS/) CHO S.  
 XX  
 PI Kong Y, Chung J, Bakh YY, Kang S, Cho S;  
 XX  
 DR WPI; 2001-316170/33.  
 XX  
 PT Novel purified recombinant Taenia solium metacestodes protein useful for  
 PT detecting neurocysticercosis disease, has specified molecular weight and  
 PT is encoded by truncated fragment of open reading frame DNA sequence.  
 XX  
 PS Example 2; Page 10; 33pp; English.  
 XX  
 CC The present invention provides the protein and coding sequences of the  
 CC Taenia solium metacestodes 10Kda antigen. The sequences can be used in  
 CC the diagnosis of T. solium infection, which current methods are incapable  
 CC of distinguishing from other parasitic infections. Infection by the  
 CC parasite causes neurocysticercosis, which can then lead to neurological  
 CC diseases, in Asia, Africa and the Latin Americas. The present sequence is  
 CC a PCR primer for the coding sequence of the invention  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 15; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Oy 1241 CCTCATCTTTGTTT 1255

```

Db      18  CCTCATCTTGTGTTT 4
          |||
RESULT 415
AAS06525/C
ID      AAS06525 standard; DNA; 19 BP.
XX
AC      AAS06525;
XX
DT      07-SEP-2001 (first entry)
XX
DE      Mouse microglia and macrophage regulatory gene primer #60.
XX
KW      Mouse; microglia; macrophage; regulatory gene; digital sequence tag; DST;
KW      PCR-based total gene expression analysis; TOGA; infectious disorder;
KW      neuroinflammatory pathology; neurodegenerative disease; gene therapy;
KW      hyperproliferative disorder; autoimmune; inflammatory disorder; primer;
KW      ss.
XX
OS      Mus musculus.
XX
PN      WO200134770-A2.
XX
PD      17-MAY-2001.
XX
PF      06-NOV-2000; 2000WO-US030585.
XX
PR      12-NOV-1999; 99WO-US026824.
PR      03-MAR-2000; 2000US-0186770P.
PR      19-JUN-2000; 2000US-0212465P.
XX
PA      (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
PI      Carlson MJ, Sutcliffe JG, Almazan MT, Tobal GM;
DR      WPI; 2001-308782/32.
XX
PT      New regulated genes of microglia and macrophages, useful for diagnosing,
PT      preventing or treating neuroinflammatory pathology and neurodegenerative
PT      disease.
XX
PS      Example 1; Page 88; 244pp; English.
XX
CC      The present sequence represents a primer used to isolate novel mouse
CC      microglia and macrophage regulatory gene DST (digital sequence tag)
CC      sequences. AAS06401-AAS06590 represent these novel sequences and the
CC      primer sequences used to isolate them. The PCR-based total gene
CC      expression analysis (TOGA) system is used to examine the expression
CC      pattern of molecules corresponding to genes that are regulated in
CC      unstimulated microglia, activated microglia, unstimulated macrophage and
CC      activated macrophage. The polynucleotides of the invention, the
CC      polypeptides encoded by them and antibodies that bind to these
CC      polypeptides are useful for the diagnosis, prevention,
CC      treatment or amelioration of a medical condition, preferably a
CC      neuroinflammatory pathology or a neurodegenerative disease such as
CC      Alzheimer's disease, senile dementia, Parkinson's disease, obsessive
CC      compulsive disorders, epilepsy, schizophrenia, multiple sclerosis,
CC      depression and bipolar manic-depressive disorder. The sequences and
CC      methods of the invention can also be used for detecting or treating
CC      infectious disorders (e.g. AIDS), hyperproliferative disorders (e.g.
CC      cancer), immune disorders (e.g. severe combined immunodeficiency, SCID)
CC      autoimmune diseases (e.g. insulin dependent diabetes mellitus),
CC      inflammatory disorders (e.g. arthritis). The polynucleotides can be used
CC      for gene therapy
XX
SQ      Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match      1.1%; Score 15; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 4.2e+02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
OY      1519 TAAATAAATAAAGTAA 1537

```

```

Db      19  BAAAAAAAAAAAAAAAAA 1
          :|||
RESULT 416
ABK71509/C
ID      ABK71509 standard; DNA; 19 BP.
XX
AC      ABK71509;
XX
DT      30-JUL-2002 (first entry)
XX
DE      CNS related 3' sequencing primer.
XX
KW      Central nervous system; CNS; neuroleptic; mouse; human; psychoses;
KW      neuropsychiatric disorder; psychiatric disorder; Alzheimer's disease;
KW      Pick's disease; Binwanger's disease; senile dementia; encephalopathy;
KW      Parkinson's disease; obsessive compulsive disorder; epilepsy; ischaemia;
KW      addiction; multiple sclerosis; depression; manic-depressive disorder;
KW      primer; ss.
XX
OS      Synthetic.
XX
PN      WO200226936-A2.
XX
PD      04-APR-2002.
XX
PF      01-OCT-2001; 2001WO-US030695.
XX
PR      29-SEP-2000; 2000US-0236790P.
PR      18-JAN-2001; 2001US-0263084P.
XX
PA      (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
PI      Thomas EA, Sutcliffe JG, Pribyl TM, Hilbush BS, Hasel KM;
DR      WPI; 2002-383271/41.
XX
PT      New polynucleotide useful in gene therapy for preventing, treating
PT      modulating or ameliorating a medical condition such as psychoses or a
PT      neuro psychiatric disorder e.g. schizophrenia, or a bipolar disorder in a
PT      mammal.
XX
PS      Example 1; Page 40; 254pp; English.
XX
CC      This invention relates to the cDNA sequences of novel isolated
CC      polynucleotides associated with psychoses or other neuropsychiatric
CC      disorders. The sequences of the invention may act as blockers of D 2
CC      receptors in the meso-limbic dopamine system. The nucleotide sequences of
CC      the invention and the polypeptides encoded by them are useful in the
CC      manufacture of a medicament useful for preventing, treating, modulating
CC      or ameliorating a medical condition e.g. a neuropsychiatric disorder. An
CC      antibody that binds the proteins of the invention is useful for
CC      preventing, treating, modulating or ameliorating neurological disorders
CC      such as psychoses or other neuropsychiatric disorders in a subject. The
CC      sequences are also useful for diagnosing neurological disorders or a
CC      susceptibility to a neurological disorder such as psychoses and other
CC      neuro psychiatric disorders in a subject by determining the presence or
CC      absence of mutation in the nucleotide sequence of apolipoprotein D or by
CC      determining the alteration (increase or decrease) in the expression of
CC      apolipoprotein D. The sequences of the invention are useful in treating
CC      deficiencies or disorders of the central nervous system or peripheral
CC      nervous system by activating or inhibiting the proliferation, stem cells
CC      or glial cells. The sequences are useful as a marker or detector of a
CC      particular nervous system disease or disorder such as Alzheimer's
CC      disease, Pick's disease, Binwanger's disease, other senile dementia,
CC      Parkinson's disease, obsessive compulsive disorders, epilepsy,
CC      encephalopathy, ischaemia, addiction, multiple sclerosis, depression and
CC      manic-depressive disorder. The present sequence represents an
CC      oligonucleotide primer used in the identification of the cDNA sequences
CC      of the invention
XX

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SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;  
Query Match 1.1%; Score 15; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 4.2e+02;  
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
QY 1519 TAAAAAAAAAGTAAA 1537  
:|||||  
Db 19 BAAAAAAAAAAAAAAAAA 1  
RESULT 417  
ABQ73231/c  
ID ABQ73231 standard; DNA; 19 BP.  
XX  
AC ABQ73231;  
XX  
DT 27-SEP-2002 (first entry)  
XX  
DE Rabbit atherosclerosis related TOGA primer SEQ ID NO:26.  
XX  
DE Rabbit; Oryctolagus cuniculus; atherosclerosis; intimal hyperplasia;  
KM TOGA primer; ss.  
XX  
OS Oryctolagus cuniculus.  
OS Synthetic.  
XX  
PN WO200242420-A2.  
XX  
PD 30-MAY-2002.  
XX  
PF 21-NOV-2001; 2001WO-US044072.  
XX  
PR 21-NOV-2000; 2000US-0252216P.  
XX  
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.  
XX  
PI Leonardi A, Sartani A, Glass JR, Hasel KM;  
XX  
DR WPI; 2002-575233/61.  
XX  
PT New polynucleotides related to regulated genes characteristic of  
PT atherosclerosis, useful for diagnosing, preventing, treating, modulating  
PT or ameliorating atherosclerosis in a mammalian subject.  
XX  
PS Disclosure; Page 28; 130pp; English.  
XX  
CC The present invention describes an isolated polynucleotide (I) and its  
CC complements, and degenerate variants, comprising a sequence selected from  
CC those given in ABQ73206 to ABQ73222 (NS), which is a digital sequence tag  
CC (DSGT) corresponding to mRNAs whose expression is regulated by  
CC proliferative lesion development caused by mechanically induced lesions  
CC hyperplasia, or by lercandipine treatment, or by proliferative lesions  
CC and reversed by lercandipine treatment. (I) has antiatherosclerotic  
CC activity and can be used in gene therapy. (I) can be used for diagnosing  
CC a medical condition (e.g. atherosclerosis) in a subject which involves  
CC determining the presence or absence of a mutation in (I) and diagnosing  
CC the medical condition based on the presence or absence of the mutation.  
CC (I) is also useful for diagnosing atherosclerosis, or the susceptibility  
CC to atherosclerosis in a subject which involves detecting an alteration  
CC (an increase or decrease) in amount of expression of (I). (I) is also  
CC useful for diagnosing or monitoring the effects of treating a subject  
CC with dihydropyridine calcium antagonist e.g., lercandipine. (I) can also  
CC be used for preventing, treating, modulating, or ameliorating a medical  
CC condition such as atherosclerosis in a mammalian subject. The present  
CC sequence represents a TOGA primer which is used in the exemplification of  
CC the present invention  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;  
Query Match 1.1%; Score 15; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 4.2e+02;  
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAAAAGTAAA 1537  
:|||||  
Db 19 BAAAAAAAAAAAAAAAAA 1  
RESULT 418  
AAD34663/c  
ID AAD34663 standard; DNA; 19 BP.  
XX  
AC AAD34663;  
XX  
DT 16-JUL-2002 (first entry)  
XX  
DE PCR primer #4 used for direct sequencing of TOGA generated PCR products.  
XX  
DE Hepatitis B virus; HBV infection; chronic hepatitis; toxicity; virucide;  
KM acute hepatitis; therapeutic; gene therapy; vaccine; infectious disease;  
KM TOGA; Total Gene Expression Analysis; PCR; primer; ss.  
XX  
OS Unidentified.  
XX  
PN WO200222783-A2.  
XX  
PD 21-MAR-2002.  
XX  
PF 17-SEP-2001; 2001WO-US029123.  
XX  
PR 15-SEP-2000; 2000US-0233176P.  
XX  
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.  
XX  
PI Chisari FV, Wieland SF, Guidotti LGDVM, Mueller R, Hildush BS;  
XX  
DR WPI; 2002-339865/37.  
XX  
PT Preventing and treating hepatitis viral infection in a mammal, comprises  
PT administering nucleic acid molecules that up- or down-regulate in  
PT hepatitis B virus infection or polypeptides encoded by the nucleic acid  
PT molecules.  
XX  
PS Disclosure; Page 28; 125pp; English.  
XX  
CC The present invention relates to a method for preventing, treating,  
CC modulating or ameliorating a medical condition. The method involves  
CC administering one or more nucleic acid molecules up- or down-regulated in  
CC hepatitis B virus (HBV) infection or polypeptides encoded by the nucleic  
CC acid molecules or antibodies that bind to the polypeptide. The method is  
CC useful for preventing, treating, modulating or ameliorating a medical  
CC condition. It is also useful for determining the presence or absence of a  
CC mutation in the nucleic acid molecules or detecting an alteration in  
CC expression of the polypeptide which is useful for the diagnosis of  
CC hepatitis viral infection. The method is useful for assessing the stage  
CC of hepatitis viral infection (e.g., acute hepatitis versus chronic  
CC hepatitis) or assessing the efficacy or toxicity of therapeutic treatment  
CC for hepatitis viral infection and a gene expression profile is useful for  
CC identifying polypeptides and polynucleotides which are associated with  
CC hepatitis viral infection. Sequences of the invention are used in gene  
CC therapy and as vaccines. Nucleic acid sequences are useful as a  
CC diagnostic markers for HBV infection and for treating infectious  
CC diseases. The present DNA sequence is a PCR primer which is used for  
CC direct sequencing of TOGA (Total Gene Expression Analysis) generated PCR  
CC products  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;  
Query Match 1.1%; Score 15; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 4.2e+02;  
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
QY 1519 TAAAAAAAAAGTAAA 1537  
:|||||  
Db 19 BAAAAAAAAAAAAAAAAA 1

```
RESULT 419
AAd40279/c
ID AAd40279 standard; DNA; 19 BP.
XX
AC AAd40279;
XX
DT 22-OCT-2002 (first entry)
XX
DE HOOK PCR primer used to isolate pumpkin 2beta-3beta hydroxylase cDNA.
XX
KM Gibberellin; transgenic plant; seed germination; seedling growth; GA;
XX transgenic; 2beta-3beta hydroxylase; enzyme; pumpkin; PCR; primer; ss.
XX
OS Cucurbita pepo.
XX
PN US2002053095-A1.
XX
PD 02-MAY-2002.
XX
PF 10-AUG-1999; 99US-00371307.
XX
PR 10-AUG-1999; 99US-00371307.
XX
PA (BROW/) BROWN S M.
XX
PI Brown SM, Ellich TD, Heck GR, Kishore GM, Logusch EW, Logusch SJ,
PI Piller KU, Rao S, Ream JE;
XX
DR WPI; 2002-489107/52.
XX
PT Control of gibberellin levels in plants useful to avoid unfavorable
PT conditions in crops to increase yields, using transgenic plants having
PT reduced seed germination and early seedling growth then treatment to
PT restore these properties.
XX
PS Example 19; Page 104; 155pp; English.
XX
CC The invention relates to control of gibberellin (GA) levels in plants.
CC The method involves producing transgenic plants having a phenotype of
CC reduced seed germination and reduced early seedling growth, then
CC restoring seed germination and early seedling growth by treating plants
CC with an appropriate compound when conditions are favourable. The method
CC is useful to control seed germination and/or early seedling growth in
CC agricultural production so that unfavorable environmental conditions
CC normally reducing agronomic output can be avoided and yields increased.
CC Plants also demonstrate increased uniformity of germination, emergence
CC and seedling vigor, so increasing yields at harvest. The method is
CC especially useful in crop plants such as e.g. canola, soybean, cotton,
CC etc., and is also useful in storage and transport of seeds to reduce
CC premature germination which may affect agronomic or food quality of the
CC seeds. The present sequence is a PCR primer used to isolate pumpkin 2beta
CC -3beta hydroxylase cDNA. This primer is used in the exemplification of
CC the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match 1.1%; Score 15; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 4.2e+02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAATAAAAAAAAAAGTAAA 1537
DB 19 BAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 420
ABK94423/c
ID ABK94423 standard; DNA; 19 BP.
XX
AC ABK94423;
XX
```

```
DT 27-AUG-2002 (first entry)
XX
DE Human MLH1 DNA mismatch repair gene, exon 12, PCR primer 12.1F.
XX
KM hMLH1; DNA mismatch repair; BRCA1; ss; PCR; primer; BRCA1;
KM breast and ovarian cancer susceptibility gene; TGDS; human;
KM two-dimensional DNA electrophoresis; tumour suppressor gene;
KM breast cancer; ovarian cancer; tumour.
XX
OS Homo sapiens.
XX
PN WO200236819-A1.
XX
PD 10-MAY-2002.
XX
PF 06-NOV-2000; 2000WO-IB001607.
XX
PR 06-NOV-2000; 2000WO-IB001607.
XX
PA (SCSC-) ACAD APPLIED SCI.
XX
PI Vigg J;
XX
DR WPI; 2002-471507/50.
XX
PT Detecting mutations in the BRCA1 and hMLH1 gene comprises subjecting
PT amplification products to 2-dimensional gel electrophoresis to produce a
PT characteristic spot pattern for a specific mutation in either the BRCA1
PT or the hMLH1 gene.
XX
PS Claim 6; Page 21; 57pp; English.
XX
CC The invention relates to detecting mutations in the BRCA1 and hMLH1 gene
CC comprising subjecting a set of amplification products to produce a
CC DNA electrophoresis (TGDS) to produce a characteristic spot pattern for a
CC specific mutation in either the BRCA1 or the hMLH1 gene. Also included
CC are test kits for enabling BRCA1 or hMLH1 gene testing comprising short
CC PCR primers given in the specification, mixed in 20 mM of Tris-HCl, 50 mM
CC KCl, 25 micro M of dNTP, and 5 % formamide. The method is useful for
CC detecting mutations in the BRCA1 (breast and ovarian cancer
CC susceptibility gene), a tumour suppressor gene) and hMLH1 gene (a DNA
CC mismatch repair gene). The present sequence is a PCR primer specific to
CC hMLH1 used in the method of the invention
XX
SQ Sequence 19 BP; 4 A; 1 C; 0 G; 14 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1517 ATTAAAAAAAAAAAAA 1531
DB 16 ATTAAAAAAAAAAAAA 2
XX
RESULT 421
ABZ68389/c
ID ABZ68389 standard; DNA; 19 BP.
XX
AC ABZ68389;
XX
DT 22-APR-2003 (first entry)
XX
DE Reverse transcription primer used to produce yeast cDNA.
XX
KM Histone acetyltransferase; histone deacetylase; gene expression profile;
KM chromatin-associated protein; gene expression; primer; ss.
XX
OS Synthetic.
XX
PN WO2003000715-A1.
XX
PD 03-JAN-2003.
```

```
XX 21-JUN-2002; 2002WO-US019750.
XX
XX 22-JUN-2001; 2001US-0300135P.
XX
XX (CERE-) CERES INC.
XX
XX Dang V, Okamura J;
XX
XX WPI; 2003-175280/17.
XX
XX
XX New chimeric polypeptide comprising a histone acetyltransferase
XX polypeptide segment and a segment comprising a histone deacetylase
XX chromatin-associated protein complex subunit, useful for modulating gene
XX expression in cells.
XX
XX Example 10; Page 54; 85pp; English.
XX
XX The specification describes chimeric histone acetyltransferase
XX polypeptides. The chimeric polypeptides comprise a polypeptide segment
XX that exhibits histone acetyltransferase activity, and a polypeptide
XX segment having 40% or greater sequence identity to a subunit of a histone
XX deacetylase chromatin-associated protein complex. The chimeric
XX polypeptides are useful for determining gene expression profiles in
XX specific cells, for modulating gene expression in specific cells, and for
XX making genetically modified eukaryotes. The present sequence represents a
XX reverse transcription primer used in the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
SQ
XX
XX Query Match 1.1%; Score 15; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 4.2e+02;
XX Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1519 TAAAAAAAAAAGTAAA 1537
XX :|||||
XX 19 BAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 422
XX ACC79402/c
XX ID ACC79402 standard; DNA; 19 BP.
XX
XX AC ACC79402;
XX
XX 04-AUG-2003 (first entry)
XX
XX M13 sequencing primer 3' primer SEQ ID NO:84.
XX
XX Pathological condition; ataxia telangiectasia; AT; tumour; cancer;
XX cytostatic; vaccine; gene therapy; PCR primer; ss.
XX
XX Enterobacteria phage M13.
XX
XX Synthetic.
XX
XX WO2003033668-A2.
XX
XX 24-APR-2003.
XX
XX 17-OCT-2002; 2002WO-US033311.
XX
XX 17-OCT-2001; 2001US-0330206P.
XX
XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
XX Barlow C, Winrow CJ, Callahan MLA, Pankratz DG, Vibat CRT;
XX Warren AJ;
XX
XX WPI; 2003-393520/37.
XX
XX Preventing or treating a pathological condition e.g., ataxia
XX telangiectasia (AT), AT tumours or other cancers comprises administering
XX polynucleotides.
```

```
XX Example 1; Page 76; 184pp; English.
XX
XX The present invention describes a method for preventing or treating a
XX pathological condition (comprising ataxia telangiectasia (AT), AT tumours
XX or other cancers), which comprises administering to a mammalian subject
XX at least one of: (a) a first polynucleotide comprising a sequence having
XX 38-889 bp (consisting of the sequences in ACC79319 to ACC79392 (1)) or a
XX second polynucleotide at least 95% identical to the first polynucleotide;
XX (b) a third polynucleotide comprising at least 10-bp sequence that is
XX hybridisable to the first polynucleotide under stringent conditions; or
XX (c) a gene corresponding to any of (1)-(2) or another gene at least 95%
XX identical to the gene. (1) have cyrostatic activities, and can be used in
XX vaccines and in gene therapy. The method is useful for preventing or
XX treating e.g., ataxia telangiectasia (AT), AT tumours or other cancers.
XX ACC79393 to ACC79423 represent primers used in the exemplification of the
XX present invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
SQ
XX
XX Query Match 1.1%; Score 15; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 4.2e+02;
XX Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1519 TAAAAAAAAAAGTAAA 1537
XX :|||||
XX 19 BAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 423
XX AAD49149/c
XX ID AAD49149 standard; DNA; 19 BP.
XX
XX AC AAD49149;
XX
XX 07-MAR-2003 (first entry)
XX
XX 3' sequencing primer #1 used in the invention.
XX
XX Atherosclerosis; vaccine; nervous system disorder; Alzheimer's disease;
XX Parkinson's disease; multiple sclerosis; immune disorder; gene therapy;
XX autoimmune disorder; rheumatoid arthritis; hyperproliferative disorder;
XX haemolytic anaemia; graft-versus-host disease; inflammation; infection;
XX epilepsy; Addison's disease; neoplasm; tissue regeneration; chemocaxis;
XX food additive; food preservative; primer; ss.
XX
XX Unidentified.
XX
XX WO200281726-A2.
XX
XX 17-OCT-2002.
XX
XX 15-NOV-2001; 2001WO-US043741.
XX
XX 15-NOV-2000; 2000US-0248892P.
XX
XX 28-NOV-2000; 2000US-0253623P.
XX
XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
XX Leonardi A, Sartani A, Glaes J, Sutcliffe JG, Hasel KW;
XX
XX WPI; 2003-058561/05.
XX
XX New polypeptide associated with atherosclerosis, useful for treating
XX atherosclerosis, nervous system disorders, immune disorders,
XX hyperproliferative disorders and infectious diseases.
XX
XX Disclosure; Page 139; 146pp; English.
XX
XX The invention relates to polynucleotides and polypeptides associated with
XX atherosclerosis. Polynucleotides of the invention are useful for delivery
XX of genes, DNA vaccines, diagnostic reagents, peptides, proteins or
XX macromolecules. Sequences of the invention are useful for treating
```



CC nervous system disorders (e.g., Alzheimer's disease, Parkinson's disease,  
CC multiple sclerosis, epilepsy), immune disorders (e.g., autoimmune  
CC disorders such as rheumatoid arthritis, Addison's disease, haemolytic  
CC anaemia, graft-versus-host disease, inflammation), hyperproliferative  
CC disorders (e.g., neoplasms) and infectious diseases (e.g., viral,  
CC bacterial, fungal or parasite infection). They are used for regeneration  
CC of tissues, to repair, replace or protect damage tissues, for increasing  
CC chemotaxis activity of cells, for increasing or decreasing the  
CC differentiation or proliferation of embryonic stem cells from a lineage,  
CC for modulating mammalian characteristics, (such as body weight or  
CC height), for modulating mammalian metabolism affecting catabolism,  
CC anabolism, processing utilisation and storage of energy, to change a  
CC mammal's mental or physical state, or as a food additive or preservative.  
CC The invention is useful in gene therapy. The present sequence is a  
CC sequencing primer used in the invention  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;  
  
Query Match 1.1%; Score 15; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 4.2e+02;  
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1519 TAAAAAAAAAAGTAAA 1537  
:|||||  
Db 19 BAAAAAAAAAAAAAAAAA 1  
  
RESULT 424  
AAD50267/C  
ID AAD50267 standard; DNA; 19 BP.  
XX  
XX AAD50267;  
XX  
DT 24-MAR-2003 (first entry)  
XX  
XX 3' sequencing primer #1 used to illustrate the method of the invention.  
DE  
XX Gene expression; drug interaction mechanism; drug screening; primer;  
KW genomic mapping; ss.  
XX  
XX Unidentified.  
OS  
XX WO200261045-A2.  
PN  
XX 08-AUG-2002.  
PD  
XX  
XX 01-FEB-2002; 2002WO-US002666.  
PF  
XX 01-FEB-2001; 2001US-00775217.  
PR  
XX  
XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.  
PA (QUAN/) QUAN J.  
XX  
XX Quan J, Hilbush BS, Hasei KMPD, Sutcliffe GJ, Chang HW;  
PI Callahan MA;  
XX  
XX WPI; 2003-092784/08.  
DR  
XX  
XX Simplified TOGA method for simultaneous sequence-specific identification  
PT of multiple mRNA molecules in mRNA population, useful for determining  
PT tissue-specific patterns of gene expression or mechanisms of drug  
PT interaction.  
XX  
XX  
XX Disclosure; Page 39; 93pp; English.  
PS  
XX The present invention relates to a novel simplified TOGA (RTM) method for  
CC simultaneous sequence-specific identification of multiple mRNA molecules  
CC in a RNA population. The method involves characterising each of the  
CC sequence-specific polymerase chain reaction (PCR) products by partial  
CC sequence and length. The method is useful for determining tissue-specific  
CC patterns of gene expression or mechanisms of drug interaction. It is also  
CC useful for drug screening, studying physiological processes, genomic  
CC mapping or manufacture of diagnostic, prognostic or therapeutic reagents.

CC The present sequence is a primer used to illustrate the method of the  
CC invention  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;  
  
Query Match 1.1%; Score 15; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 4.2e+02;  
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1519 TAAAAAAAAAAGTAAA 1537  
:|||||  
Db 19 BAAAAAAAAAAAAAAAAA 1  
  
RESULT 425  
ADC21495/C  
ID ADC21495 standard; DNA; 19 BP.  
XX  
XX ADC21495;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
XX Human PRDI-BF1 RT-PCR primer.  
DE  
XX  
XX tumor; antigen; CD8+ cytotoxic T lymphocyte; CTL; CTL-induced lysis;  
KW multiple myeloma cell; human; PRDI-BF1;  
KW positive regulatory domain T-binding factor-1, MHC;  
KW major histocompatibility complex Class I; cytostatic; vaccine; ss;  
KW primer; PCR.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO2003029282-A2.  
PN  
XX 10-APR-2003.  
PD  
XX  
XX 24-SBP-2002; 2002WO-EP010701.  
PF  
XX 29-SEP-2001; 2001DE-01048236.  
PR  
XX  
XX (IMMU-) IMMUGENICS AG.  
PA  
XX  
XX Theobald M, Lotz C;  
PI  
XX WPI; 2003-354724/33.  
DR  
XX  
XX New tumor-associated oligopeptide, useful particularly for treating  
PT multiple myeloma, is recognized by CD8 cytotoxic T cells, also  
PT derivatives and related nucleic acid.  
XX  
XX  
XX Disclosure; Page 22; 64pp; German.  
PS  
XX  
XX This invention describes a novel tumor-associated oligopeptide that is  
CC recognized as an antigen by CD8+ cytotoxic T lymphocytes (CTL) and causes  
CC CTL-induced lysis and/or apoptosis of tumor cells, especially multiple  
CC myeloma cells. The oligopeptide is derived from human PRDI-BF1 (positive  
CC regulatory domain T-binding factor-1) which is able to induce an MHC  
CC (major histocompatibility complex) Class I allele variant A2-restricted  
CC immune response of CD8+ CTL against tumor cells. The products of the  
CC invention have cytostatic activity and can be used in a vaccine. The  
CC peptide of the invention, also related retro-inverse and pseudopeptides,  
CC fusion proteins (FP), polynucleotides, vectors, host cells and antibodies  
CC and T cell receptors specific for PRDI-BF1 peptides are useful for  
CC treating diseases associated with PRDI-BF1, particularly tumors. The  
CC products of the invention are also useful as diagnostic, therapeutic and  
CC prophylactic agents for detecting, modifying, generating, expanding  
CC and/or regulating activation and functional status of T cells, and for  
CC preparation of poly- or mono-clonal or recombinant A2-restricted T cell  
CC receptors and their functional equivalents. This sequence represents an  
CC RT-PCR primer used to amplify the human PRDI-BF1 gene described in the  
CC invention.  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 1.1%; Score 15; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 4.2e+02;  
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAAAAAGTAAAA 1537  
:|||||  
DB 19 BAAAAAAAAAAAAAAAAAAAA 1

## RESULT 426

ADP74670  
ID ADF74670 standard; DNA; 19 BP.

AC ADF74670;

XX 26-FEB-2004 (first entry)

DE DNA oligo (30) used in preparing a library of same length signatures.

XX ss; tag-DNA signature; adapter-signature-adapter; parallel sequencing;  
KM genomic mapping; genetic identification; medical diagnostic.

OS Unidentified.

XX WO2003091416-A2.

PN 06-NOV-2003.

PF 25-APR-2003; 2003WO-US013076.

XX 26-APR-2002; 2002US-0375782P.

PR (LYNX-) LYNX THERAPEUTICS INC.

XX Fiascher A, Hiemisch H, Williams S, Brenner S, Walker R;  
PI Vermaas E, Fu R;

XX WPI; 2003-865585/80.

XX Preparing a library of same-length signature sequences from a source  
PT nucleic acid population by ligating to the cleaved ends, a second adapter  
PT containing a recognition and cleavage site for a second restriction  
PT endonuclease.

XX Disclosure; Fig 2a; 54pp; English.

XX This invention relates to a novel method for preparing a library of same-  
CC length signature sequences from a source nucleic acid population.

CC Specifically, it comprises producing solid phase cloned libraries of  
CC oligonucleotide tag-DNA signature sequence constructs, which are useful  
CC for sequencing many polynucleotides simultaneously. The present invention  
CC describes a kit for the construction of adapter-signature-adapter  
CC constructs using 'first' and 'second' adapters each containing a specific  
CC restriction endonuclease recognition site, and which flanks the same  
CC length signature sequence. As such, using the method described herein it  
CC is possible to do parallel sequencing of large populations of  
CC polynucleotides for genomic mapping, genetic identification and medical  
CC diagnostics. This oligonucleotide sequence is a DNA oligo involved in the  
CC step wise process of preparing a library of same length signature  
CC sequences from restriction fragments in an exemplification of the  
CC invention.

XX Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 1.1%; Score 15; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 4.2e+02;

Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAAAAAGTAAAA 1537  
:|||||  
DB 1 BAAAAAAAAAAAAAAAAAAAA 19

RESULT 427  
ADL24850/c  
ID ADL24850 standard; DNA; 19 BP.

XX ADL24850;

XX 20-MAY-2004 (first entry)

DE Intestinal epithelium/peyer's patch M cell-related primer #15.

XX intestinal epithelium cell development; peyer's patch M cell development;  
KM inflammatory bowel disease; glutenenteropathy; infectious disease;

KM autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis;  
KM Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus;

KM immune system disorder; hypersensitivity; anaphylaxis;  
KM blood group incompatibility; ss; PCR; primer.

XX Unidentified.

XX WO200280852-A2.

PN 17-OCT-2002.

PF 04-APR-2002; 2002WO-US010873.

XX 04-APR-2001; 2001US-0281416P.

PR (DIGI-) DIGITAL GENE TECHNOLOGIES INC.

XX Brayden DJ, Byrne D, O'mahony DJ, Evans CF, Mah SP, Lo DD;

XX WPI; 2003-075470/07.

XX Novel isolated or purified polypeptide encoded by genes associated with  
PT intestinal epithelium or M cell development, differentiation or function,  
PT useful for treating autoimmune diseases and infectious diseases.

XX Disclosure; SEQ ID NO 360; 152pp; English.

XX The invention comprises DNA sequences which are associated with  
CC intestinal epithelium and peyer's patch M cells. The DNA sequences of the  
CC invention are useful for assessing, modifying, modulating or regulating

CC intestinal epithelium or M cell development. The DNA sequences of the  
CC invention are also useful in the treatment of: inflammatory bowel  
CC disease, glutenenteropathy, infectious diseases, autoimmune diseases  
CC (e.g. haemolytic anaemia, rheumatoid arthritis, dermatitis, Grave's  
CC disease, multiple sclerosis, allergy, asthma and diabetic mellitus),  
CC diseases or disorders of the immune system, hypersensitivity,  
CC anaphylaxis, and blood group incompatibility. The present DNA sequence  
CC represents a primer that was used in the exemplification of the  
CC invention.

XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 1.1%; Score 15; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 4.2e+02;

Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1519 TAAAAAAAAAAGTAAAA 1537  
:|||||  
DB 19 BAAAAAAAAAAAAAAAAAAAA 1

## RESULT 428

AAZ09197/c  
ID AAZ09197 standard; DNA; 20 BP.

XX AAZ09197;

XX 19-OCT-1999 (first entry)

DE Oligonucleotide 9 for DNA analysis.

XX Primer; DNA analysis; amplification; hybridisation; ss.  
XX Synthetic.  
OS Jp1196874-A.  
XX 27-JUL-1999.  
XX 14-JAN-1998; 98JP-00005399.  
XX 14-JAN-1998; 98JP-00005399.  
XX 14-JAN-1998; 98JP-00005399.  
XX (HITA ) HITACHI LTD.  
XX WPI; 1999-496652/42.  
XX Analysis of DNA fragment - comprises addition of known common  
PT oligonucleotide, amplification of resultant DNA fragment and analysis and  
PT labelling of amplified DNA.  
XX Example 5; Page 12; 17pp; Japanese.  
XX This invention describes a novel method for the analysis of a DNA fragment  
CC which comprises: (i) addition of a known common oligonucleotide sequence  
CC to at least one terminal of each DNA fragment, (ii) amplification of the  
CC resultant DNA fragment as a primer using a first common primer containing  
CC a complementary nucleotide sequence to the above mentioned known common  
CC oligonucleotide sequence, a second common primer containing a  
CC complementary nucleotide sequence to the prepared known common  
CC oligonucleotide sequence optionally having been introduced with  
CC complementary nucleotide sequence at a terminal, and a specific primer  
CC capable of hybridisation with a DNA fragment containing whole or part of  
CC the gene having known sequence, to give amplified DNA, (iii) analysis of  
CC the amplified DNA to find the information of the DNA fragment, in which  
CC the specific primer is designed to prepare fragments of the common first  
CC and second primers and to give short fragment of amplified DNA and (iv)  
CC labelling them to make their differentiation. Differentiation of  
CC information of known and unknown genes readily provides information of  
CC unknown gene and simultaneous monitoring of signals derived from minor  
CC genes. Furthermore, labelling of DNAs according to functions of known  
CC genes can be performed. AA209189-209201 represent oligonucleotide primers  
XX used to illustrate the method of the invention  
XX  
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 2 Other;  
Query Match 1.1%; Score 15; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 4e+02;  
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
Qy 1519 TAAAAAAAAAGTAAA 1537  
Db 19 BAAAAAAAAAAAAAAAAA 1  
XX  
RESULT 429  
AAZ72079/c  
ID AAZ72079 standard; DNA; 20 BP.  
XX  
AC AAZ72079;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human biallelic marker upstream amplification primer SEQ ID NO:6435.  
XX  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX

PN WO9954500-A2.  
XX 28-OCT-1999.  
XX 21-APR-1999; 99WO-IB000822.  
XX 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX (GEST ) GENSET.  
XX Cohen D, Blumenfeld M, Chumakov I;  
XX WPI; 2000-013267/01.  
XX  
XX Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
XX Claim 9; Page 1603; 2745pp; English.  
XX  
CC AA265654 to AA269578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AA269579 to AA277440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3357, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 20 BP; 6 A; 2 C; 9 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 941 CCTCAGTCACCTTCT 955  
Db 16 CCTCAGTCACCTTCT 2  
XX  
RESULT 430  
AAC82923/c  
ID AAC82923 standard; DNA; 20 BP.  
XX  
AC AAC82923;  
XX  
DT 21-MAR-2001 (first entry)  
XX  
DE Human S-9 derived oligonucleotide #7.  
XX  
KW Recognition system; screening; identification; pharmaceutical; toxin;  
KW plant protection agent; toxin; venom; carcinogen; venom; teratogen;  
KW herbicide; fungicide; pesticide; beta-actin; human; ss.  
XX  
OS Homo sapiens.  
XX  
DE DE19923966-A1.  
XX  
PD 30-NOV-2000.  
XX  
PE 25-MAY-1999; 99DE-01023966.  
XX  
PR 25-MAY-1999; 99DE-01023966.  
XX  
XX (AVET ) AVENTIS RES & TECHNOLOGIES GMBH & CO KG.  
XX

PI Boekenkamp D, Hoppe H, Birsteiller P;  
XX  
XX WPI; 2001-050938/07.  
XX  
XX Recognition system, e.g. for identifying nucleic acids, comprises at  
PT least one recognition unit comprising a region with a defined structure  
PT adjacent to a region with a randomized structure.  
XX  
XX Example; Fig 1; 8pp; German.  
XX  
CC This invention describes a novel recognition system comprising at least 1  
CC recognition unit bound to a support, each recognition unit comprising a  
CC region A with a defined structure adjacent to a region B with a  
CC randomized structure. The recognition system is useful for screening,  
CC identifying, or characterizing at least 1 component of a sample,  
CC especially nucleic acids and/or proteins, and for screening for and/or  
CC identifying cellular or synthetic binding partners, preferably proteins,  
CC peptides, nucleic acids, chemical agents, preferably organic compounds,  
CC pharmaceuticals, plant protection agents, toxins, venoms, carcinogens,  
CC teratogens, herbicides, fungicides or pesticides  
XX  
SQ Sequence 20 BP; 2 A; 2 C; 2 G; 14 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1517 ATTAAAAAAAAAAAA 1531  
DB 16 ATTAAAAAAAAAAAA 2  
RESULT 431  
ABK99800  
ID ABK99800 standard; DNA; 20 BP.  
XX  
XX ABK99800;  
AC  
XX  
XX 21-OCT-2002 (first entry)  
DT  
XX  
XX Mouse RAIDD antisense oligonucleotide #54.  
DE  
XX  
XX Antisense gene therapy; RAIDD; death domain; caspase recruitment domain;  
KW CARD; hyperproliferative disorder; cancer; growth disorder; mouse;  
KW metabolic disorder; infection; inflammation; tumour formation;  
KW RIP associated ICH-1/CED-3-homologous protein with death domain;  
KW receptor interacting protein; antisense oligonucleotide; ss.  
XX  
XX Mus musculus.  
OS  
XX  
XX WO200248314-A2.  
PN  
XX  
XX 20-JUN-2002.  
PD  
XX  
XX 29-OCT-2001; 2001WO-US050914.  
PF  
XX  
XX 01-NOV-2000; 2000US-00705267.  
PR  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Zhang H, Freier SM, Watt AT;  
PI  
XX  
XX WPI; 2002-583496/62.  
DR  
XX  
XX Novel antisense compound that hybridizes and inhibits nucleic acid  
PT encoding RAIDD which is an adaptor molecule containing both death domain  
PT and caspase recruitment domains, for treating hyperproliferative  
PT disorder.  
XX  
XX Claim 3; Page 95; 14pp; English.  
PS  
XX  
XX The invention describes a compound (I) 8-50 nucleobases in length  
CC targeted to a nucleic acid molecule (II) encoding RAIDD which is an

CC adaptor molecule containing both death domain (DD) and caspase  
CC recruitment domains (CARD), where (I) specifically hybridizes with and  
CC inhibits expression of RAIDD, or specifically hybridizes with at least an  
CC 8-nucleobase portion of an active site on (II). (I) is useful for  
CC inhibiting the expression of RAIDD (Receptor interacting protein (RIP)  
CC associated ICH-1/CED-3-homologous protein with death domain) in cells or  
CC tissues, and for treating an animal having a disease or condition  
CC associated with RAIDD, where the disease or condition is a  
CC hyperproliferative disorder such as cancer, or a growth or metabolic  
CC disorder. (I) is also useful for diagnostics, therapeutics, prophylaxis,  
CC as research reagents and kits, for distinguishing functions of various  
CC members of a biological pathway, and in antisense gene therapy. (I) is  
CC also useful prophylactically, e.g. to prevent or delay infection,  
CC inflammation or tumour formation. This sequence represents a mouse RAIDD  
CC antisense oligonucleotide used to control expression of the RAIDD protein  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1539 GGAAGCAGGATGTC 1553  
DB 6 GGAAGCAGGATGTC 20  
RESULT 432  
ABZ88781  
ID ABZ88781 standard; DNA; 20 BP.  
XX  
XX ABZ88781;  
AC  
XX  
XX 17-OCT-2003 (first entry)  
DT  
XX  
XX Human oligonucleotide sequence.  
DE  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; de.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200285308-A2.  
PN  
XX  
XX 31-OCT-2002.  
PD  
XX  
XX 23-APR-2002; 2002WO-US013135.  
PF  
XX  
XX 24-APR-2001; 2001US-0286137P.  
PR  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
PA  
XX  
XX Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI  
XX  
XX Miller S, Tang L, Shahabuddin S;  
PI  
XX  
XX WPI; 2003-229219/22.  
DR  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX Disclosure; SEQ ID NO 4023; 872pp; English.  
PS  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to, adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 0 A; 0 C; 4 G; 16 T; 0 U; 0 Other;

Query Match 1.1%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1248 TTGTGTTTGTGTTT 1262  
Db 5 TTGTGTTTGTGTTT 19

RESULT 433  
ABD25011  
ID ABD25011 standard; DNA; 20 BP.  
XX  
AC ABD25011;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE A1128305-derived oligonucleotide SEQ ID 4023.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KM respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KM surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
KM analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KM respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KM pulmonary transplantation rejection; ss; primer.

XX OS Homo sapiens.  
XX  
XX PN WC020285309-A2.  
XX  
XX PD 31-OCT-2002.  
XX  
XX PF 23-APR-2002; 2002WO-US013143.  
XX  
XX PR 24-APR-2001; 2001US-0286036P.  
XX  
XX PA (EPIC-) ERIGENESIS PHARM INC.  
XX  
XX PI NYce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
XX Miller S, Tang L, Shahbuddin S;  
XX  
XX DR WPI; 2003-093056/08.  
XX  
XX PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
XX  
XX PS Claim 15; SEQ ID NO 4023; 763pp; English.  
XX  
XX CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it

XX  
SQ Sequence 20 BP; 0 A; 0 C; 4 G; 16 T; 0 U; 0 Other;

Query Match 1.1%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1248 TTGTGTTTGTGTTT 1262  
Db 5 TTGTGTTTGTGTTT 19

RESULT 434  
ADO81089  
ID ADO81089 standard; DNA; 20 BP.  
XX  
XX AC ADO81089;  
XX  
XX DT 29-JUL-2004 (first entry)  
XX  
XX DE Sheep prion protein microsatellite locus primer #60.  
XX  
XX KM gene typing; polymorphic microsatellite loci; PMU;  
KM disease predisposition; microsatellite marker; prion disease;  
KM cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;  
KM milk protein; hormone; transcription factor; PT-blue-vector; sheep;  
KM microsatellite; PCR; primer; ss.  
XX  
XX OS Ovis aries.  
XX  
XX PN DE10236711-A1.  
XX  
XX PD 26-FEB-2004.  
XX  
XX PF 09-AUG-2002; 2002DE-01036711.  
XX  
XX PR 09-AUG-2002; 2002DE-01036711.  
XX  
XX PA (UYHO-) UNIV HOHENHEIM.  
XX  
XX PI Geldermann H, Preuss S, Han Y;  
XX  
XX DR WPI; 2004-215730/21.  
XX  
XX PT Typing genes that contain polymorphic microsatellite loci, useful for  
PT identifying predisposition to disease, by amplification and determining

```
PT length of amplicons.
XX
PS Example 3; Page 30; 64pp; German.
XX
CC The invention describes a method of typing (M1) a gene (I) that has one
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC amplification of at least one DNA region of (I) that includes PML, using
CC as template a DNA sample containing at least one segment of (I); and
CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (MM) for
CC predisposition to a disease, associated with a gene that includes one or
CC more PML, and prediagnosis (M3) of diseases associated with genes that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins,
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the sheep prion
CC protein (Prp) comprising a polymorphic microsatellite locus.
XX
SQ Sequence 20 BP; 0 A; 0 C; 3 G; 17 T; 0 U; 0 Other;
Query Match 1.1%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1248 TTGTTTGTGTTT 1262
Db 1 TTGTTTGTGTTT 15
RESULT 435
ADOB1043
ID ADOB1043 standard; DNA; 20 BP.
XX
AC ADOB1043;
XX
DT 29-JUL-2004 (first entry)
XX
DE Cow prion protein microsatellite locus primer #55.
XX
KM gene typing; polymorphic microsatellite loci; PML;
KM disease predisposition; microsatellite marker; prion disease;
KM cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KM milk protein; hormone; transcription factor; PT7-blue-vector; cow;
KM microsatellite; PCR; primer; ss.
XX
OS Bos taurus.
XX
PN DE10236711-A1.
XX
PD 26-FEB-2004.
XX
PF 09-AUG-2002; 2002DE-01036711.
XX
PR 09-AUG-2002; 2002DE-01036711.
XX
PA (UYHO-) UNIV HOHENHEIM.
XX
PI Geldermann H, Preuss S, Han Y;
XX
DR WPI; 2004-215730/21.
XX
PT Typing genes that contain polymorphic microsatellite loci, useful for
PT identifying predisposition to disease, by amplification and determining
PT length of amplicons.
XX
PS Example 3; Page 27; 64pp; German.
XX
CC The invention describes a method of typing (M1) a gene (I) that has one
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
```

```
CC amplification of at least one DNA region of (I) that includes PML, using
CC as template a DNA sample containing at least one segment of (I); and
CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (MM) for
CC predisposition to a disease, associated with a gene that includes one or
CC more PML, and prediagnosis (M3) of diseases associated with genes that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins,
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the cow prion
CC protein (Prp) comprising a polymorphic microsatellite locus.
XX
SQ Sequence 20 BP; 0 A; 0 C; 3 G; 17 T; 0 U; 0 Other;
Query Match 1.1%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1248 TTGTTTGTGTTT 1262
Db 1 TTGTTTGTGTTT 15
RESULT 436
ACCA48482/c
ID ACCA48482 standard; DNA; 21 BP.
XX
AC ACCA48482;
XX
DT 11-AUG-2003 (first entry)
XX
DE Locked nucleic acid anchored oligo(I) primer OM12.
XX
KM Locked nucleic acid; LNA; gene therapy; primer; ss.
XX
OS Synthetic.
XX
FH Key
FH modified_base
FT 1 location/Qualifiers
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base
FT 3 /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base
FT 5 /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base
FT 7 /*tag= d
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base
FT 9 /*tag= e
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base
FT 11 /*tag= f
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base
FT 13 /*tag= g
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base
FT 15 /*tag= h
FT /mod_base= OTHER
```

```

FT FT modified_base /note= "OTHER= locked nucleic acid"
FT FT 17 /tag= 1
FT FT /mod_base= OTHER
FT FT /note= "OTHER= locked nucleic acid"
FT FT 19
FT FT /tag= 1
FT FT /mod_base= OTHER
FT FT /note= "OTHER= locked nucleic acid"
FT FT 21
FT FT /tag= k
FT FT /mod_base= OTHER
FT FT /note= "OTHER= locked nucleic acid"
FT FT modified_base 22
FT FT /tag= 1
FT FT /mod_base= OTHER
FT FT /note= "OTHER= Compound 17d"
XX XX WO2003020739-A2.
XX XX 13-MAR-2003.
XX XX
XX XX 04-SEP-2002; 2002WO-IB003911.
XX XX
XX XX 04-SEP-2001; 2001US-0317034P.
XX XX 22-SEP-2001; 2001US-0323967P.
XX XX
XX XX (EXIQ-) EXIQON AS.
XX XX
XX XX Wengel J, Kauppinen S;
XX XX WPI; 2003-363021/34.
XX XX
XX XX Novel nucleic acid comprising a locked nucleic acid unit having a
PT modified base that comprises an optionally substituted carbocyclic aryl
PT moiety, or modified nucleobase or nucleosidic base other than
PT oxazole/imidazole.
XX XX
XX XX Example 24a; Page 90; 119pp; English.
XX XX
XX XX The present sequence is that of pyrene-anchored locked nucleic acid (LNA)
CC oligo(dT) primer ON12, which was used in first-strand cDNA synthesis from
CC eukaryotic mRNA. It includes compound '17d' at its 3' end, which is based
CC on an LNA-type 2'-O,4'-C-methylene-beta-D-ribofuranosyl moiety. It is
CC one of a set of such primers (see also ACC48483-85) that were used in an
CC example from the invention to demonstrate improved reverse transcription
CC of mRNA using pyrene-LNA anchored oligo(T) primers. The following results
CC were observed: efficient priming on mRNAs with short poly(A) tails;
CC efficient anchoring of the oligo(T) primer by pyrene-LNA and LNA-C/G/T
CC units resulting in an improved T20-VN anchor primer and thus avoiding
CC reverse transcription of long poly(A) tracts; and improved reverse
CC transcription of eukaryotic poly(A)+RNA directly from total RNA extracts
CC due to increased specificity. The invention relates to modified LNA units
CC that comprise unique base groups. Desirable nucleobase and nucleosidic
CC base substitutions can mediate universal hybridisation when incorporated
CC into nucleic acid strands. The novel LNA compounds can be used e.g. as
CC PCR primers, in sequencing, the synthesis of antisense oligonucleotides,
CC and in diagnostics
XX XX
XX XX Sequence 21 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 2 Other;
XX XX
XX XX Query Match 1.1%; Score 15; DB 1; Length 21;
XX XX Best Local Similarity 84.2%; Pred. No. 3.8e+02;
XX XX Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0
OY 1519 TAAAAAAAAAAGTAAA 1537
DB :|||||
DB 20 BAAAAAAAAAAAAAAAAA 2

```

```

XX AC ACG99729;
XX DT 02-SEP-2003 (first entry)
XX XX
DE Oligonucleotide.
XX KM Multiplex real-time quantitative PCR; PCR primer; copy number;
XX KM Alzheimer's disease; ss.
XX OS Synthetic.
XX PN W02003048377-A2.
XX 12-JUN-2003.
XX PD
XX PF 02-DEC-2002; 2002MO-US03806.
XX PR 30-NOV-2001; 2001US-0336095P.
XX PR 19-JUL-2002; 2002US-0397475P.
XX PA (UVRP ) UNIV ROCHESTER.
XX PA (THER/) THERIANOS S.
XX PI Zhu M, Coleman P;
XX DR WPI; 2003-532841/50.
XX
XX PT Determining the relative copy number of a group of target nucleic acid
XX PT molecules present in a sample by performing a first or second PCR in a
XX PT PCR mixture and quantifying the number of copies of the second target
XX PT nucleic acid product.
XX PS
XX PS Example 1; Page 68; 118pp; English.
XX
CC CC The present invention describes a multiplex real-time quantitative PCR
CC method for determining the relative copy number of a group of target
CC nucleic acid molecules present in a sample. The method comprises: (1)
CC performing a first PCR in a PCR mixture; (2) performing a second PCR in a
CC PCR mixture; and (3) quantifying the number of copies of the second
CC target nucleic acid product present in the sample containing the target
CC nucleic acid molecule. Also described: (1) quantifying the copy number of
CC a group of target nucleic acids in a sample; and (2) determining whether
CC a subject is at risk of acquiring Alzheimer's disease. The method is
CC useful for determining the relative copy number of a group of target
CC nucleic acid molecules present in a sample for determining whether a
CC subject is at risk of acquiring Alzheimer's disease. ACG99620 to ACG99730
CC represent PCR primer used in the exemplification of the present invention
XX
SQ Sequence 21 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 2 Other;

Query Match 1.1%; Score 15; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 3.8e+02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0

CY 1519 TAAAAAAAAAAGTAAAA 1537
:|||||||
Db 20 BAAAAAAAAAAAAAAAAA 2

RESULT 438
ADD20377/C
ID ADD20377 standard; DNA; 21 BP.
XX
XX AC ADD20377;
XX
XX DT 15-JAN-2004 (first entry)
XX
XX DE Oreoichromis niloticus microsatellite primer SEQ ID NO:1012.
XX
XX KM single nucleotide polymorphism; SNP; fish; Salmo salar;
XX KM Oreochromis niloticus; Atlantic halibut; microsatellite; cod;
XX KM polymorphic site; seabass; salmonidae; tilapia; rainbow trout; halibut;

```

KM detection; primer; ss.  
XX  
OS Synthetic.  
OS Oreochromis niloticus.  
PN WO2003060160-A2.  
XX  
XX 24-JUL-2003.  
PD  
PF 17-JAN-2003; 2003WO-IB000112.  
XX  
XX 18-JAN-2002; 2002US-0349950P.  
PR 16-AUG-2002; 2002US-0404200P.  
XX  
XX (GENO-) GENOMAR ASA.  
PA  
PI Lie O, Sletten A, Hoyum M, Lingaas F;  
XX  
XX WPI; 2003-627388/59.  
DR  
XX  
XX Novel isolated nucleic acid molecule comprising single nucleotide  
PT polymorphism associated with fish, useful for forming PCR primers which  
PT are used for detecting single nucleotide polymorphisms in fish nucleic  
PT acids.  
XX  
XX Claim 18; SEQ ID NO 1012; 233bp; English.  
PS  
XX  
XX The present invention describes an isolated nucleic acid (I) comprising a  
CC single nucleotide polymorphism (SNP) chosen from: (i) a nucleic acid of  
CC Salmo salar SNPs, Oreochromis niloticus SNPs or Atlantic halibut SNPs;  
CC and (ii) a nucleic acid having nucleotide sequence that hybridises to  
CC (i), or its complement under highly stringent hybridisation conditions.  
CC Also described: (1) an isolated oligonucleotide (II) comprising at least  
CC 17 contiguous nucleotides of a nucleotide sequence of S. salar SNPs, O.  
CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod  
CC polymorphic sites and seabass polymorphic sites, or their complement; (2)  
CC a primer pair (III) suitable for use in PCR, comprising two (II) capable  
CC of amplifying a nucleotide sequence chosen from S. salar SNPs and, O.  
CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod  
CC polymorphic sites and seabass polymorphic sites; and determining (M1) the  
CC origin of fish sample comprising providing a parent genotype database  
CC comprising a collection of candidate parent genotypes, where each of the  
CC candidate parent genotype represents a distinct origin, and comparing a  
CC sample genotype to the parent genotype database, where a match between  
CC the sample genotype and one of the candidate parent genotype identifies  
CC to the origin of the sample. (M1) is useful for determining the origin of  
CC a fish sample such as family salmonidae, S. salar, Tilapia, O. niloticus,  
CC rainbow trout, halibut, seabass and Atlantic cod. (II) is useful for  
CC detecting nucleic acid molecule comprising SNP in a sample, which  
CC involves contacting the sample containing nucleic acids with one or more  
CC (II) derived from nucleotide sequence of S. salar SNPs and O. niloticus  
CC SNPs, and identifying nucleic acid that hybridises to (II). (II) is  
CC useful for detecting nucleic acid molecule comprising a polymorphic  
CC sequence in a sample, comprising contacting the sample containing nucleic  
CC acids with one or more (II) which is derived from O. niloticus  
CC microsatellite, O. niloticus SNPs, Atlantic halibut SNPs, cod polymorphic  
CC sites or seabass polymorphic sites, and identifying a nucleic acid that  
CC hybridises to (II). (II) is useful for detecting nucleic acid molecule  
CC comprising a microsatellite sequence in sample. The present sequence is  
CC used in the exemplification of the present invention.  
XX  
XX  
SQ Sequence 21 BP; 11 A; 4 C; 5 G; 1 T; 0 U; 0 Other;  
Query Match 1.1%; Score 15; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 735 TGTGCTTTGTGAC 749  
DB 19 TGTGCTTTGTGAC 5  
RESULT 439

AD081045  
ID AD081045 standard; DNA; 21 BP.  
XX  
XX AC AD081045;  
XX  
XX  
DT 29-JUL-2004 (first entry)  
XX  
XX DE Cow prion protein microsatellite locus primer #57.  
XX  
XX gene typing; polymorphic microsatellite loci; PML;  
KM disease predisposition; microsatellite marker; prion disease;  
KM cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;  
KM milk protein; hormone; transcription factor; pT7-blue-vector; cow;  
KM microsatellite; PCR; primer; ss.  
XX  
XX Bos taurus.  
OS  
XX  
XX DE10236711-A1.  
PN  
XX  
XX 26-FEB-2004.  
PD  
XX  
XX 09-AUG-2002; 2002DE-01036711.  
PF  
XX  
XX 09-AUG-2002; 2002DE-01036711.  
PR  
XX  
XX (UYHO-) UNIV HOHENHEIM.  
PA  
PI Geldermann H, Preuss S, Han Y;  
XX  
XX WPI; 2004-215730/21.  
DR  
XX  
XX Typing genes that contain polymorphic microsatellite loci, useful for  
PT identifying predisposition to disease, by amplification and determining  
PT length of amplicons.  
XX  
XX Example 3; Page 27; 64pp; German.  
PS  
XX  
XX The invention describes a method of typing (M1) a gene (I) that has one  
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR  
CC amplification of at least one DNA region of (I) that includes PML, using  
CC as template a DNA sample containing at least one segment of (I); and  
CC determining the length of the resulting amplicon(s). Also described are:  
CC a method of determining (M2) microsatellite markers (MM) for  
CC predisposition to a disease, associated with a gene that includes one or  
CC more PML; and diagnosis (M3) of diseases associated with gene that  
CC include PML. The method is used to identify microsatellite markers, in a  
CC disease-related gene, that are associated with a predisposition to  
CC diseases and for diagnosis of such diseases, especially prion diseases  
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and  
CC metabolic diseases; also to type genes that encode milk proteins,  
CC hormones or transcription factors. The method is simpler, quicker and  
CC particularly less expensive than known methods based on sequencing. This  
CC sequence represents a primer used to genotype a region of the cow prion  
CC protein (PrP) comprising a polymorphic microsatellite locus.  
XX  
XX  
SQ Sequence 21 BP; 0 A; 0 C; 3 G; 17 T; 0 U; 1 Other;  
Query Match 1.1%; Score 15; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1248 TTGTTTGTGTTTTT 1262  
DB 1 TTGTTTGTGTTTTT 15  
RESULT 440  
ABK12409/c  
ID ABK12409 standard; DNA; 24 BP.  
XX  
XX AC ABK12409;  
XX  
XX  
DT 18-JUN-2002 (first entry)  
XX  
XX



```
XX RT-PCR primer #1 for cDNA encoding polypeptide-laminin B210.67.
DE
XX Polypeptide-laminin B210.67; embryo development teratogenesis;
KM cytosolic; reverse transcriptase-PCR; RT-PCR; primer; ss.
XX
XX Unidentified.
OS
XX CN1328013-A.
PN
XX 26-DEC-2001.
PD
XX 14-JUN-2000; 2000CN-00116514.
PF
XX 14-JUN-2000; 2000CN-00116514.
PR
XX 14-JUN-2000; 2000CN-00116514.
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
PI Mao Y, Xie Y;
XX WPI; 2002-270054/32.
DR
XX Polypeptide-laminin B210.67, useful for treating diseases such as embryo
PT development teratogenesis.
XX
XX Example 2; Page 18 (disclosure); 33pp; Chinese.
PS
XX The present invention relates to the isolation of polypeptide-laminin
CC B210.67, and the polynucleotide encoding it. Also described is the
CC process for preparing the protein by DNA recombination. The polypeptide
CC is useful for treating diseases such as embryo development teratogenesis.
CC The present sequence for reverse transcriptase (RT)-PCR primer #1 is used
CC with RT-PCR primer #2 (ABK12410) for isolating cDNA encoding polypeptide-
CC laminin B210.67
CC
XX Sequence 24 BP; 19 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 15; DB 1; Length 24;
Best Local Similarity 78.3%; Pred. No. 3.3e+02;
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
OY 1248 TTTGTTTGGTTTAAATCAGAT 1270
DB 24 TTTT TTTT TTTT TTTT TTTT AAGAT 2
RESULT 441
AAQ34110
ID AAQ34110 standard; DNA; 18 BP.
XX
XX AAQ34110;
AC
XX 25-MAR-2003 (revised)
DT 02-FEB-1993 (first entry)
XX
XX Sequence of a microsatellite from clone TGLA60B.
DE
XX PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KM genetic mapping; traits; amplification; ss.
XX
XX Bos taurus.
OS
XX W09213102-A1.
PN
XX 06-AUG-1992.
PD
XX 15-JAN-1992; 92MO-US000340.
PF
XX 15-JAN-1991; 91US-00642342.
PR
XX (GENM-) GENMARK.
PA
XX George M, Massey JM;
PI
```

```
XX WPI; 1992-284684/34.
DR
XX Polymorphic bovine DNA markers - used in genetic identification, gene
PT mapping, and selective breeding.
XX
XX Table 7; Page 375; 517pp; English.
PS
XX The sequence is that of a bovine microsatellite sequence obtd. by
CC screening a library of bovine MboI DNA fragments of between 250 and 500
CC bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC clones cross-hybridised. Assuming independent distribution of
CC microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC in the bovine genome is estimated at >100, 000. The sequence information
CC for ca. 230 such bovine microsatellites is summarised in the
CC specification and indexed herein (see below). The sequences upstream and
CC downstream of the microsatellite sequence were used to generate the
CC required PCR primers for in vitro amplification of the corresp.
CC microsatellite (using the program OPTIPRIM). The microsatellites may be
CC used to identify individuals, for parentage testing, and in the genetic
CC mapping of economic trait loci, or genes involved the determination of
CC economically important traits esp. in cattle, to allow selective
CC breeding. See also AAQ3501-34437. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
XX Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAA 1537
DB 1 AAAAAAAAAAAAAAAAAA 18
RESULT 442
AAQ75025/C
ID AAQ75025 standard; RNA; 18 BP.
XX
XX AAQ75025;
AC
XX 25-MAR-2003 (revised)
DT 03-AUG-1995 (first entry)
XX
XX PCR primer.
DE
XX Synthetic oligo; solid phase immunoassay; ss.
KM Synthetic.
XX
XX W09426932-A1.
PN
XX 24-NOV-1994.
PD
XX 13-MAY-1994; 94MO-US005407.
PF
XX 13-MAY-1993; 93US-00061694.
PR
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA
XX Fields HA, Khudyakov YE;
PI
XX WPI; 1995-006819/01.
DR
XX Solid phase immunoassay using oligo:nucleotide as label - also new
PT conjugates of oligo:nucleotide coupled to antigenic peptide, partic. for
PT diagnosing hepatitis C or E virus infection.
XX
XX Example; Page 12; 34pp; English.
PS
XX AAR62941 and AAR62942 are examples of synthetic immunoreactive peptides.
CC They are used in a method for detecting an antigen in a subject. The
```

```
CC method involves binding the antigen to a solid support and then reacting
CC it with an immunoreactive ligand (L) bound to an oligo; removing any
CC unreacted L, and then detecting the presence of the oligo. A similar
CC method can be used to detect Abs, in which case the ligand is an oligo-
CC labelled Ag. The use of an amplifiable oligo as the label allows Ag or Ab
CC to be detected at very low levels. An exemplary oligo is AAQ75024 which
CC can be covalently attached by the 5'-terminus to the N- or C-terminal of
CC a synthetic peptide. In the example, peptide AAR62941 was coupled to
CC oligo AAQ75024 using disuccinimidyl succinate. Serum samples suspected to
CC contain HEV Abs were immobilised on plastic tubes or wells, then
CC incubated for 30-60 mins with the peptide-oligo product. The vessels were
CC washed; bound oligo was released with 0.2M glycine and amplified in a
CC separate tube using as primers AAQ75025 and AAQ75026 in 30 cycles of PCR.
CC The amplification product - AAQ75031 - was treated with uracil DNA
CC glycosylase to remove the U18 fragment, and the product captured by
CC immobilised oligo-dT. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 0 T; 18 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 443
AAT94667/c
ID AAT94667 standard; DNA; 18 BP.
XX
XX AAT94667;
AC
XX
XX 27-MAR-1998 (first entry)
DT
XX
XX Anchored poly(T) oligonucleotide polyT-AnchA.
DE
XX
XX Flavonoid 3'-hydroxylase; pigmentation; flower colour; transgenic plant;
KM snapdragon; primer; ss.
XX
XX Synthetic.
OS
XX
XX WO9732023-A1.
PN
XX
XX 04-SEP-1997.
PD
XX
XX 28-FEB-1997; 97WO-AU000124.
PF
XX
XX 01-MAR-1996; 96AU-00008386.
PR
XX
XX (FLOR-) FLORIGENE LTD.
PA
XX
XX Brugliera F, Holton TA, Michael MZ;
PI
XX
XX WPI; 1997-448691/41.
DR
XX
XX Novel flavonoid 3'-hydroxylase(s) from flowering plants - and
PT corresponding DNA, used in the manipulation of pigmentation in plants.
PS
XX
XX Example 15; Page 59; 234pp; English.
XX
XX Anchored poly(T) oligonucleotides polyT-AnchA (AAT94667), polyT-AnchC
XX (AAT94668) and polyT-AnchG (AAT94669) are complementary to the upstream
XX region of a polyadenylation sequence. They were used to prime cDNA
XX synthesis from snapdragon (Antirrhinum majus) petal and leaf RNA, and
XX were also utilised in the PCR amplification of plant cytochrome P450
XX sequences (see also AAT94670-73). A cDNA clone (see AAT94657) encoding
XX flavonoid 3'-hydroxylase (see AAM35704) was isolated using a differential
XX display approach. This can be used to manipulate the pigmentation of
XX transgenic plants
XX
SQ Sequence 18 BP; 1 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
```

```
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAAAAAGTAAA 1536
Db 18 TAAAAAAAAAAAAAAAAA 1
RESULT 444
AAK63292/c
ID AAK63292 standard; RNA; 18 BP.
XX
XX AAK63292;
AC
XX
XX 16-JUL-1999 (first entry)
DT
XX
XX Delta-9 desaturase hairpin ribozyme substrate SEQ ID NO:1167.
DE
XX
XX Maize; corn; Zea mays; delta-9 desaturase; GBS; target; substrate;
XX granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;
XX modulation; gene expression; transgenic plant; cleavage; canola plant;
XX caffeine synthesis; coffee plant; nicotine production; tobacco;
XX fruit ripening; flower pigmentation; lignin production; ss.
XX
XX Zea mays.
OS
XX
XX WO9710328-A2.
PN
XX
XX 20-MAR-1997.
PD
XX
XX 12-JUL-1996; 96WO-US011689.
PF
XX
XX 13-JUL-1995; 95US-0001135P.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX (DOWC) DOWELANCO.
PI
XX
XX Zwick MG, Edington BE, Mcswigen JA, Merlo PMO, Guo L, Skokut TA;
XX Young SA, Folkerts O, Merlo DJ;
XX WPI; 1997-202224/18.
DR
XX
XX Ribozyme which modulates plant gene expression - preferably modulates
XX expression of DELTA-9 desaturase or granule bound starch synthase in
XX maize or canola.
PT
XX
XX Claim 40; Page 93; 155pp; English.
PS
XX
XX The present invention describes an enzymatic nucleic acid molecule (1)
XX with RNA cleaving activity, which modulates the expression of a plant
XX gene. Also described is a gene comprising a cDNA sequence encoding maize
XX Delta-9 desaturase. (1) can be used to modulate expression of a gene.
XX CC preferably Delta-9 desaturase or a granule bound starch synthase (GBS)
XX gene, in a plant (preferably a maize or canola plant). (1) can be used to
XX modulate caffeine synthesis in a coffee plant, nicotine production in a
XX tobacco plant, fruit ripening processes in an apple, tomato, pear, plum
XX or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or
XX marigold plant or lignin production in a tobacco, aspen, poplar or pine
XX plant
XX
SQ Sequence 18 BP; 1 A; 11 C; 6 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 430 GCTGCGGCGCGCGGCG 447
Db 18 GCTGCGGCGGCGGCGGCG 1
```

```
RESULT 445
AA63294/c
ID AAX63294 standard; RNA; 18 BP.
XX
XX AAX63294;
XX
XX 16-JUL-1999 (first entry)
XX
XX Delta-9 desaturase hairpin ribozyme substrate SEQ ID NO:1169.
XX
XX Maize; corn; Zea mays; delta-9 desaturase; GBS; target; substrate;
XX granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;
XX modulation; gene expression; transgenic plant; cleavage; canola plant;
XX caffeine synthesis; coffee plant; nicotine production; tobacco;
XX fruit ripening; flower pigmentation; lignin production; ss.
XX
XX Zea mays.
XX
XX MO9710328-A2.
XX
XX 20-MAR-1997.
XX
XX 12-JUL-1996; 96WO-US011669.
XX
XX 13-JUL-1995; 95US-0001135P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (DMC) DOWELANCO.
XX
XX Zwick MG, Edington BE, Mcswigen JA, Merlo PAO, Guo L, Skokut TA;
XX Young SA, Folkerts O, Merlo DJ;
XX WPI; 1997-202224/18.
XX
XX Ribozyme which modulates plant gene expression - preferably modulates
XX expression of DELTA-9 desaturase or granule bound starch synthase in
XX maize or canola.
XX
XX
XX Claim 40; Page 93; 155pp; English.
XX
XX The present invention describes an enzymatic nucleic acid molecule (I)
XX with RNA cleaving activity, which modulates the expression of a plant
XX gene. Also described is a gene comprising a cDNA sequence encoding maize
XX Delta-9 desaturase. (I) can be used to modulate expression of a gene.
XX preferably Delta-9 desaturase or a granule bound starch synthase (GBS)
XX gene, in a plant (preferably a maize or canola plant). (I) can be used to
XX modulate caffeine synthesis in a coffee plant, nicotine production in a
XX tobacco plant, fruit ripening processes in an apple, tomato, pear, plum
XX or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or
XX marigold plant or lignin production in a tobacco, aspen, poplar or pine
XX plant
XX
XX Sequence 18 BP; 2 A; 10 C; 6 G; 0 T; 0 U; 0 Other;
XX
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 18;
XX Best Local Similarity 86.9%; Pred. No. 4.9e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 427 GCGGCTGCGGCGCGCG 444
XX |||||
XX 18 GCTGCTGCGGCGCGCG 1
XX
XX RESULT 446
XX AAV21970/c
XX ID AAV21970 standard; DNA; 18 BP.
XX
XX AAV21970;
XX
XX 14-JUL-1998 (first entry)
XX
XX Nuclease resistant antisense oligo NBT 13 targeted against (T)18.
XX
```

```
KW Nuclease resistant; bacterial infection; antibiotic; target;
KW veterinary medicine; treatment; human; industrial process;
KW bacterial control; ss.
XX
XX Synthetic.
XX
XX MO9803533-A1.
XX
XX 29-JAN-1998.
XX
XX 23-JUL-1997; 97WO-US012961.
XX
XX 24-JUL-1996; 96US-00685575.
XX
XX (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
XX
XX Arrow A, Dale RMK, Thompson TL;
XX
XX WPI; 1998-120687/11.
XX
XX Treating bacterial infections in humans or animals with
XX oligo:nucleotide(s) - resistant to nuclease and targeted to bacterial
XX nucleic acid or proteins, also conjugates of these oligo:nucleotide(s)
XX with antibiotics.
XX
XX Claim 49; Page 87; 163pp; English.
XX
XX This antisense oligonucleotide is nuclease resistant and can be used in
XX the treatment of animals, including humans, having a bacterial infection.
XX The treatment comprises administration of such nuclease resistant
XX oligonucleotides, targeted to a nucleic acid or protein of the bacterium,
XX and formulated with a carrier. A compound comprising this nuclease
XX resistant oligonucleotide can be covalently linked to an antibiotic. The
XX method is used to treat infections by a wide variety of Gram-positive and
XX Gram-negative, or acid-fast, bacteria, in human and veterinary medicine.
XX The methods are particularly used in immuno-compromised individuals (e.g.
XX patients with acquired immunodeficiency syndrome or those receiving
XX chemotherapy or radiation therapy), optionally in combination with, or
XX fused to, antiviral or other antimicrobial oligonucleotides. Apart from
XX therapeutic use, the oligonucleotides can be used to control bacteria in
XX laboratory cultures, foods, beverages and industrial processes. The
XX oligonucleotides are specific for bacteria, without affecting metabolism
XX in mammalian cells. They may also activate RNase H and have a general,
XX non-specific immune-stimulating effect. The oligonucleotides can be
XX administered orally, intranasally, rectally, topically or by injection,
XX optionally coupled to an agent (e.g. carbohydrate or polyamine) that
XX enhances cellular uptake
XX
XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 18;
XX Best Local Similarity 88.9%; Pred. No. 4.9e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 18 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 447
XX AAX19943/c
XX ID AAX19943 standard; DNA; 18 BP.
XX
XX AAX19943;
XX
XX 14-JUN-1999 (first entry)
XX
XX Primer SEQ ID NO:3 from JP11075880.
XX
XX primer; oligonucleotide; labelling; detection; self-priming; PCR; ss.
XX
XX Synthetic.
XX
```

```
PN JP11075880-A.
XX
XX 23-MAR-1999.
XX
XX 10-JUL-1998; 98JP-00195719.
XX
XX 14-JUL-1997; 97JP-00205378.
XX
XX (KAGA ) ZH KAGAKU & KESSEI RYOHO KENKYUSHO.
XX
XX WPI; 1999-257710/22.
XX
XX Labelling of an oligonucleotide - useful for detecting genes.
XX
XX Example 1; Page 7; 10pp; Japanese.
XX
XX A method has been developed for labelling an oligonucleotide having a
CC repeated sequence of (XY)n (where X and Y consists of a combination of
CC adenine and thymine or uracil or guanine and cytosine, and n is an
CC integer of 1 or more ) at the 3'-terminal side in which the repeated
CC sequence is added and extended using a labelled body of the nucleotide
CC constituting the repeated sequence and a DNA polymerase lacked in 5' to
CC 3' exonuclease activity. The method can be used for detecting a gene. The
CC method can detect a gene in a sensitivity up to ten times higher than
CC prior art methods. The present sequence represents a primer used in an
CC example from the present invention
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 448
AA19942
ID AA19942 standard; DNA; 18 BP.
XX
XX AA19942;
XX
XX 14-JUN-1999 (first entry)
XX
XX Primer SEQ ID NO:2 from JP11075880.
XX
XX Primer; oligonucleotide; labelling; detection; self-priming; PCR; ss.
XX
XX Synthetic.
XX
XX JP11075880-A.
XX
XX 23-MAR-1999.
XX
XX 10-JUL-1998; 98JP-00195719.
XX
XX 14-JUL-1997; 97JP-00205378.
XX
XX (KAGA ) ZH KAGAKU & KESSEI RYOHO KENKYUSHO.
XX
XX WPI; 1999-257710/22.
XX
XX Labelling of an oligonucleotide - useful for detecting genes.
XX
XX Example 1; Page 7; 10pp; Japanese.
XX
XX A method has been developed for labelling an oligonucleotide having a
CC repeated sequence of (XY)n (where X and Y consists of a combination of
CC adenine and thymine or uracil or guanine and cytosine, and n is an
CC integer of 1 or more ) at the 3'-terminal side in which the repeated
CC sequence is added and extended using a labelled body of the nucleotide
```

```
CC constituting the repeated sequence and a DNA polymerase lacked in 5' to
CC 3' exonuclease activity. The method can be used for detecting a gene. The
CC method can detect a gene in a sensitivity up to ten times higher than
CC prior art methods. The present sequence represents a primer used in an
CC example from the present invention
XX
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 449
AA18372/C
ID AA18372 standard; DNA; 18 BP.
XX
XX AA18372;
XX
XX 11-MAY-1999 (first entry)
XX
XX RT-PCR primer of the invention SEQ ID 13.
XX
XX RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
XX
XX RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
XX
XX Synthetic.
XX
XX JP11032765-A.
XX
XX 09-FEB-1999.
XX
XX 18-JUL-1997; 97JP-00208312.
XX
XX 18-JUL-1997; 97JP-00208312.
XX
XX (TAKI ) TAKARA SHUZO CO LTD.
XX
XX WPI; 1999-183822/16.
XX
XX Peptides having at least two new nucleotides - useful as primers in RT-
XX PCR.
XX
XX Disclosure; Page 11; 19pp; Japanese.
XX
XX This sequence represents a primer of the invention. The invention relates
CC to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta
CC -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or
CC a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n =
CC natural number indicating the repetition of alpha; beta, delta = V or N;
CC V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or
CC thymine; gamma, k = natural number of 3 or over indicating the
CC repetition of gamma, in which thymine expressed by gamma is composed of
CC 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are
CC useful as primers for RT-PCR and determination of base sequences. The new
CC sequences allow for reproductive and highly efficient analysis of gene
CC sequences
XX
XX Sequence 18 BP; 2 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1514 TTAATTAAAAA 1531
Db 18 TTAATAAAAAAAAAAAAAA 1

RESULT 450
```

```
AAZ87161
ID  AAZ87161 standard; RNA; 18 BP.
XX
AC  AAZ87161;
XX
DT  08-MAY-2000 (first entry)
XX
DE  Oligoarabinonucleotide SEQ ID NO:2.
XX
KM  Beta-D-arabinose; antisense; inhibition; transcription; expression;
KW  reverse transcription; viral replication; RNase H cleavage;
XX  triple helix formation; ss.
XX
OS  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 1..18
FT  /tag= a
FT  /note= "Ribose moiety replaced by beta-D-arabinose"
XX
PN  WO9967378-A1.
XX
PD  29-DEC-1999.
XX
PF  17-JUN-1999; 99WO-CA000571.
XX
PR  19-JUN-1998; 98CA-02241361.
XX
PA  (UYMC-) UNIV MCGILL.
XX
PI  Damha MJ, Parniak MA, Noronha AM, Wilds C, Borkow G, Arion D;
XX  WPI; 2000-160584/14.
XX
DR  WPI; 2000-160584/14.
XX
PT  Therapeutic composition containing antisense oligonucleotides that
XX  include arabinose sugars, particularly for inhibiting viral replication.
XX
PS  Example 1; Page 29; 91pp; English.
XX
CC  The invention relates to a new composition for selective, sequence-
CC  specific inhibition of gene transcription and expression in a host. The
CC  composition comprises oligonucleotides containing arabinose sugars that
CC  can hybridise to either a single-stranded (ss) RNA to induce RNase H
CC  cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple
CC  helix, thereby inhibiting DNA replication and/or transcription. The
CC  oligoarabinonucleotides are used for antisense inhibition of gene
CC  expression or to prevent DNA replication, or reverse transcription of RNA
CC  by retroviruses. The compositions are therefore particularly used to
CC  inhibit retroviral replication. The oligoarabinonucleotides can also be
CC  used, in combination with RNase H, as reagents for sequence-specific
CC  cleavage or RNA mapping, and additionally for the study and control of
CC  gene expression in cells. The oligoarabinonucleotides have excellent
CC  affinity for RNA, increased resistance to nucleases and show little if
CC  any non-specific binding to cellular or serum proteins. They target ss
CC  RNA, but not complementary ss DNA, so may be useful for targeting
CC  retroviral genomic RNA to inhibit the early stages of viral replication.
CC  Oligoarabinonucleotides containing pyrimidine bases form triple helices
CC  with significantly higher thermal stability than those produced by normal
CC  oligonucleotides. Sequences AAZ87160-287164 represent
CC  oligoarabinonucleotides containing beta-D-arabinose used in an
CC  exemplification of the present invention
XX
SQ  Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAA 1537
DB 1 AAAAAAAAAAAAAAAAAA 18
```

```
RESULT 451
ID  AAZ87162/C
XX  AAZ87162 standard; RNA; 18 BP.
XX
AC  AAZ87162;
XX
DT  08-MAY-2000 (first entry)
XX
DE  Oligoarabinonucleotide SEQ ID NO:3.
XX
KM  Beta-D-arabinose; antisense; inhibition; transcription; expression;
KW  reverse transcription; viral replication; RNase H cleavage;
XX  triple helix formation; ss.
XX
OS  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 1..18
FT  /tag= a
FT  /note= "Ribose moiety replaced by beta-D-arabinose"
XX
PN  WO9967378-A1.
XX
PD  29-DEC-1999.
XX
PF  17-JUN-1999; 99WO-CA000571.
XX
PR  19-JUN-1998; 98CA-02241361.
XX
PA  (UYMC-) UNIV MCGILL.
XX
PI  Damha MJ, Parniak MA, Noronha AM, Wilds C, Borkow G, Arion D;
XX  WPI; 2000-160584/14.
XX
DR  WPI; 2000-160584/14.
XX
PT  Therapeutic composition containing antisense oligonucleotides that
XX  include arabinose sugars, particularly for inhibiting viral replication.
XX
PS  Example 1; Page 29; 91pp; English.
XX
CC  The invention relates to a new composition for selective, sequence-
CC  specific inhibition of gene transcription and expression in a host. The
CC  composition comprises oligonucleotides containing arabinose sugars that
CC  can hybridise to either a single-stranded (ss) RNA to induce RNase H
CC  cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple
CC  helix, thereby inhibiting DNA replication and/or transcription. The
CC  oligoarabinonucleotides are used for antisense inhibition of gene
CC  expression or to prevent DNA replication, or reverse transcription of RNA
CC  by retroviruses. The compositions are therefore particularly used to
CC  inhibit retroviral replication. The oligoarabinonucleotides can also be
CC  used, in combination with RNase H, as reagents for sequence-specific
CC  cleavage or RNA mapping, and additionally for the study and control of
CC  gene expression in cells. The oligoarabinonucleotides have excellent
CC  affinity for RNA, increased resistance to nucleases and show little if
CC  any non-specific binding to cellular or serum proteins. They target ss
CC  RNA, but not complementary ss DNA, so may be useful for targeting
CC  retroviral genomic RNA to inhibit the early stages of viral replication.
CC  Oligoarabinonucleotides containing pyrimidine bases form triple helices
CC  with significantly higher thermal stability than those produced by normal
CC  oligonucleotides. Sequences AAZ87160-287164 represent
CC  oligoarabinonucleotides containing beta-D-arabinose used in an
CC  exemplification of the present invention
XX
SQ  Sequence 18 BP; 0 A; 0 C; 0 G; 0 T; 18 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAA 1537
DB 18 AAAAAAAAAAAAAAAAAA 1
```

```
RESULT 452
AA287166/C
ID AA287166 standard; DNA; 18 BP.
XX
AC AA287166;
XX
DT 08-MAY-2000 (first entry)
XX
DE Deoxyarabinonucleotide SEQ ID NO:7.
XX
2'-deoxy-2'-fluoro-beta-D-arabinose; antisense; inhibition;
KM transcription; expression; reverse transcription; viral replication;
KM RNase H cleavage; triple helix formation; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..18
FT /*tag= a
FT /note= "Deoxyribose moiety replaced by 2'-deoxy-2'-
fluoro-beta-D-arabinose"
XX
PN WO967378-A1.
XX
PD 29-DEC-1999.
XX
PF 17-JUN-1999; 99WO-CA000571.
XX
PR 19-JUN-1998; 98CA-02241361.
XX
PA (UYMC-) UNIV MCGILL.
XX
PI Damha MJ, Parniak MA, Noronha AM, Wilds C, Borkow G, Arion D;
DR WPI; 2000-160584/14.
XX
PT Therapeutic composition containing antisense oligonucleotides that
PT include arabinose sugars, particularly for inhibiting viral replication.
XX
PS Example 2; Page 31; 91pp; English.
XX
CC The invention relates to a new composition for selective, sequence-
CC specific inhibition of gene transcription and expression in a host. The
CC composition comprises oligonucleotides containing arabinose sugars that
CC can hybridize to either a single-stranded (ss) RNA to induce RNase H
CC cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple
CC helix, thereby inhibiting DNA replication and/or transcription. The
CC oligoarabinonucleotides are used for antisense inhibition of gene
CC expression or to prevent DNA replication, or reverse transcription of RNA
CC by retroviruses. The compositions are therefore particularly used to
CC inhibit retroviral replication. The oligoarabinonucleotides can also be
CC used, in combination with RNase H, as reagents for sequence-specific
CC cleavage or RNA mapping, and additionally for the study and control of
CC gene expression in cells. The oligoarabinonucleotides have excellent
CC affinity for RNA, increased resistance to nucleases and show little if
CC any non-specific binding to cellular or serum proteins. They target ss
CC RNA, but not complementary ss DNA, so may be useful for targeting
CC retroviral genomic RNA to inhibit the early stages of viral replication.
CC Oligoarabinonucleotides containing pyrimidine bases form triple helices
CC with significantly higher thermal stability than those produced by normal
CC oligonucleotides. Sequences AA287165-287169 represent
CC oligodeoxyarabinonucleotides containing 2'-deoxy-2'-fluoro-beta-D-
CC arabinose used in an exemplification of the present invention
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAAA 1537
|||||||
```

```
DB 18 AAAAAAAAAAAAAAAAAA 1
RESULT 453
AA287167
ID AA287167 standard; DNA; 18 BP.
XX
AC AA287167;
XX
DT 08-MAY-2000 (first entry)
XX
DE Deoxyarabinonucleotide SEQ ID NO:8.
XX
2'-deoxy-2'-fluoro-beta-D-arabinose; antisense; inhibition;
KM transcription; expression; reverse transcription; viral replication;
KM RNase H cleavage; triple helix formation; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..18
FT /*tag= a
FT /note= "Deoxyribose moiety replaced by 2'-deoxy-2'-
fluoro-beta-D-arabinose"
XX
PN WO967378-A1.
XX
PD 29-DEC-1999.
XX
PF 17-JUN-1999; 99WO-CA000571.
XX
PR 19-JUN-1998; 98CA-02241361.
XX
PA (UYMC-) UNIV MCGILL.
XX
PI Damha MJ, Parniak MA, Noronha AM, Wilds C, Borkow G, Arion D;
DR WPI; 2000-160584/14.
XX
PT Therapeutic composition containing antisense oligonucleotides that
PT include arabinose sugars, particularly for inhibiting viral replication.
XX
PS Example 2; Page 31; 91pp; English.
XX
CC The invention relates to a new composition for selective, sequence-
CC specific inhibition of gene transcription and expression in a host. The
CC composition comprises oligonucleotides containing arabinose sugars that
CC can hybridize to either a single-stranded (ss) RNA to induce RNase H
CC cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple
CC helix, thereby inhibiting DNA replication and/or transcription. The
CC oligoarabinonucleotides are used for antisense inhibition of gene
CC expression or to prevent DNA replication, or reverse transcription of RNA
CC by retroviruses. The compositions are therefore particularly used to
CC inhibit retroviral replication. The oligoarabinonucleotides can also be
CC used, in combination with RNase H, as reagents for sequence-specific
CC cleavage or RNA mapping, and additionally for the study and control of
CC gene expression in cells. The oligoarabinonucleotides have excellent
CC affinity for RNA, increased resistance to nucleases and show little if
CC any non-specific binding to cellular or serum proteins. They target ss
CC RNA, but not complementary ss DNA, so may be useful for targeting
CC retroviral genomic RNA to inhibit the early stages of viral replication.
CC Oligoarabinonucleotides containing pyrimidine bases form triple helices
CC with significantly higher thermal stability than those produced by normal
CC oligonucleotides. Sequences AA287165-287169 represent
CC oligodeoxyarabinonucleotides containing 2'-deoxy-2'-fluoro-beta-D-
CC arabinose used in an exemplification of the present invention
XX
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY      1520 AAAAAAAAAAGTAAAA 1537
DE      |||||
XX      1 AAAAAAAAAAAAAAAAAA 18

RESULT 454
AAA92570/c
ID AAA92570 standard; DNA; 18 BP.
XX
XX AAA92570;
XX
XX 04-JAN-2001 (first entry)
XX
XX Antisense oligonucleotide ISIS# 30280.
DE
XX Human; SRA; steroid receptor RNA activator; cytosolic; antiinflammatory;
XX SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
XX
XX Synthetic.
OS
XX US6107092-A.
XX
XX 22-AUG-2000.
XX
XX 29-MAR-1999; 99US-00280409.
XX
XX 29-MAR-1999; 99US-00280409.
XX
XX (ISIS-) ISIS PHARM INC.
XX (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
XX Cowseert LM, Bennett CF, O'malley BW;
XX WPI; 2000-586211/55.
XX
XX Antisense compounds targeted to steroid receptor RNA activator useful for
XX diagnosis, prophylaxis and treatment of diseases associated with the
XX steroid activator, such as infection, inflammation or tumor formation.
XX
XX Example 16; Col 41; 47pp; English.
XX
XX The present sequence is one of a large number of antisense
XX oligonucleotides which is directed against one of four human steroid
XX receptor RNA activator (SRA) nucleic acid sequences. Two series of
XX antisense oligonucleotides were synthesised. The first series comprised 8
XX -30 oligodeoxynucleotides with a phosphorothioate backbone. The second
XX series comprised chimeric oligonucleotides composed of a central gap
XX region, consisting of ten 2'-deoxynucleotides, which was flanked on both
XX sides by four-nucleotide wings. The wings were composed of 2'-
XX methoxyethyl (2'-MOE) nucleotides. Both series contained the same
XX nucleotide sequences. The antisense compounds are useful for research,
XX diagnosis, treatment and prophylaxis to prevent or delay infection,
XX inflammation or tumor formation. Therapeutically the oligonucleotides
XX are highly safe and are effectively administered to humans
XX
XX Sequence 18 BP; 4 A; 3 C; 1 G; 10 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY      1489 ATACATTAAATGCAGAA 1506
DE      |||||
XX      18 AAGATTAAATGCAGAAA 1

RESULT 455
AAD03565/c
ID AAD03565 standard; DNA; 18 BP.
XX
XX AAD03565;
XX
XX 19-JUN-2001 (first entry)
XX
```

```
XX      Oligonucleotide #6 used for the preparation of normalised cDNA libraries.
DE
XX Rat; secreted factor; clone P00188.D12; cardiac; antiinflammatory;
XX antiarrhythmic; antiarteriosclerotic; antithrombotic; nephroprotective;
XX antidiabetic; immunosuppressive; antiaesthetic; antineurotic;
XX antibacterial; osteoprotective; cerebroprotective; vasotrophic; antileuk;
XX neurotropic; neuroprotective; congestive heart failure; myocarditis;
XX hypertrophic cardiomyopathy; angina pectoris; myocardial infarction;
XX kidney disease; acute renal failure; renal glucosuria; renal infarction;
XX polycystic kidney disease; hereditary nephritis; inflammatory disease;
XX tumour angiogenesis; osteoarthritis; toxic shock syndrome; psoriasis;
XX stroke; neural trauma; cerebral malaria; Crohn's disease; osteoporosis;
XX ulcerative colitis; Alzheimer's disease; gene therapy; ss.
XX
XX Rattus norvegicus.
OS
XX W0200123564-A1.
XX
XX 05-APR-2001.
XX
XX 27-SEP-2000; 2000WO-US026544.
XX
XX 27-SEP-1999; 99US-0156280P.
XX
XX (SCIO-) SCTOS INC.
XX
XX Stanton LM, Kapoun AM;
XX WPI; 2001-266159/27.
XX
XX Novel secreted factor encoded by clone P00188D12 which is differentially
XX expressed in certain disease states; useful in diagnosing and treating
XX cardiac, renal or inflammatory diseases.
XX
XX Example 1; Page 42; 71pp; English.
XX
XX The patent discloses novel secreted factor protein encoded by clone
XX P00188.D12. The secreted factor is differentially expressed in certain
XX disease states. Secreted protein, its antibodies, antagonists or
XX compositions comprising them are useful in the diagnosis and treatment of
XX cardiac diseases such as congestive heart failure, myocarditis,
XX hypertrophic cardiomyopathy, angina pectoris, myocardial infarction,
XX cardiac arrhythmia, arteriosclerosis, kidney diseases such as acute renal
XX failure, renal glucosuria, renal infarction, nephrogenic diabetes
XX insipidus, polycystic kidney disease, hereditary nephritis and
XX inflammatory diseases such as asthma, autoimmune diabetes, tumour
XX angiogenesis, rheumatoid arthritis, osteoarthritis, toxic shock syndrome,
XX asthma, stroke, neural trauma, psoriasis, cerebral malaria, osteoporosis,
XX Crohn's disease, ulcerative colitis, Alzheimer's disease. Secreted
XX protein DNA is useful in antisense-mediated gene inhibition and in gene
XX therapy. An array comprising one or more oligonucleotides complementary
XX to reference RNA or DNA encoding the secreted factor is useful for
XX detecting cardiac, kidney and inflammatory disease. The present DNA
XX sequence is an oligonucleotide which is used in the preparation of a
XX normalised cDNA library containing secreted factor DNAs. The normalised
XX cDNA libraries are used in the identification of differentially expressed
XX rat secreted factor P00188.D12 gene
XX
XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY      1520 AAAAAAAAAAGTAAAA 1537
DE      |||||
XX      18 AAAAAAAAAAAAAAAAAA 1

RESULT 456
AAD17014
ID AAD17014 standard; DNA; 18 BP.
XX
```

```
XX AAD17014;
AC
XX 29-NOV-2001 (first entry)
DT
XX
XX Oligonucleotide A18-2PEG linker.
DE
XX Scaffold protein; antibody mimic; fibronectin type III domain;
KW randomised loop; randomised beta-sheet; diagnostic purpose;
KM protein designing; ss.
XX
XX Unidentified.
OS
XX
XX Key Location/Qualifiers
FH misc_feature 18
FT /*tag= a
FT /note= "Linked to (PEG)2CCPurumycin"
XX
XX WO200164942-A1.
PN
XX
XX 07-SEP-2001.
PD
XX 28-FEB-2001; 2001WO-US006414.
PF
XX 29-FEB-2000; 2000US-00515260.
PR
XX (PHYL-) PHYLLOS INC.
PA
XX
XX Lipovsek D, Wagner RW, Kuimelis RG;
PI WPI; 2001-557782/62.
DR
XX
XX Fibronectin scaffold protein array for obtaining a protein/compound which
PT binds to a compound/protein, comprises a fibronectin type III domain
PT having a randomized loop, a randomized beta-sheet or their combination.
XX
XX Disclosure; Page 25; 67pp; English.
PS
XX
XX The present invention relates to an array of proteins (antibody mimics)
CC comprising a fibronectin type III domain having a randomized loop, a
CC randomised beta-sheet, or their combination, and has the capacity to bind
CC to a compound that is not bound by a corresponding naturally- occurring
CC fibronectin, immobilised onto a solid support. The antibody mimic is
CC useful for detecting a compound preferably a protein, in a biological
CC sample. It is also useful to detect one or more different analytes
CC simultaneously in a sample. Hence is useful for diagnostic purposes. It
CC is also useful for the purpose of designing proteins capable of binding
CC to virtually any compound of interest. The present sequence is an
CC oligonucleotide A18-2PEG linker used in an exemplification of the
CC invention
CC
XX
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18
RESULT 457
AAF9708/c
ID AAF9708 standard; DNA; 18 BP.
XX
AC AAF9708;
XX
DT 12-JUN-2001 (first entry)
XX
DE Immunostimulatory nucleic acid #824.
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
```

```
KW immunostimulatory; tumour; viral infection; bacterial infection;
KM fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
XX Synthetic.
OS
XX
XX WO200122972-A2.
PN
XX
XX 05-APR-2001.
PD
XX
XX 25-SEP-2000; 2000WO-US026383.
PF
XX
XX 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
PR 23-AUG-2000; 2000US-0227436P.
XX
XX (ICMA ) UNIV ICMA RES FOUND.
PA (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Schetter C, Vollmer J;
PI WPI; 2001-273485/28.
DR
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.
PT
XX
XX Claim 101; Page 56; 338pp; English.
PS
XX
XX The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC T12 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
CC
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 458
AAF9734/c
ID AAF9734 standard; DNA; 18 BP.
XX
AC AAF9734;
XX
DT 12-JUN-2001 (first entry)
XX
DE Immunostimulatory nucleic acid #850.
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
XX Synthetic.
OS
XX
XX WO200122972-A2.
XX
```



PD	05-APR-2001.
XX	
FP	25-SEP-2000; 2000WO-US026383.
XX	
PR	25-SEP-1999; 99US-015611P.
PT	27-SEP-1999; 99US-015613P.
PR	23-AUG-2000; 2000US-0227436P.
XX	
PA	(IOWA ) UNIV IOWA RES FOUND.
XX	(COLE-) COLEY PHARM GMBH.
P1	Krieg AM, Schetter C, Vollmer U;
XX	
DR	WPI; 2001-273485/28.
XX	
PT	Vaccinating against tumors, infectious diseases, allergies and asthma
XX	using immunostimulatory Py-rich and TG nucleic acids.
PS	Claim 101; Page 56; 338pp; English.
XX	
CC	The present invention relates to a method for stimulating an immune
CC	response. The method comprises administering an immunostimulatory nucleic
CC	acid to a non-rodent subject in sufficient quantity to stimulate an
CC	immune response. The present sequence is one such immunostimulatory
CC	nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC	(py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC	against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC	and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC	haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC	staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC	also useful for preventing cancer, asthma, infectious disease, allergy or
CC	immune deficiency. The present sequence can also be used to redirect a
CC	Th2 to a Th1 immune response and to activate immune cells. Note: the
XX	present sequence may have a phosphorothioate backbone
SQ	Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
OY	Query Match 1.1%; Score 14.8; DB 1; Length 18;
D8	Best Local Similarity 88.9%; Pred. No. 4.9e+02;
	Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY	1520 AAAAAAAAAAGTAAA 1537
D8	
	18 AAAAAAAAAAAAAAA 1
RESULT 459	
AAF82472/C	
ID	AAF82472 standard; DNA; 18 BP.
XX	
AC	AAF82472;
XX	
DT	29-JUN-2001 (first entry)
DE	
XX	Phagemid vector pCR2.1 polylinker oligonucleotide #6.
KM	Phagemid vector; pCR2.1; rat; secreted factor; P00210D09; cardiac;
KM	nephrotropic; antiinflammatory; gene therapy; cardiac disease;
KM	renal disease; inflammatory disease; polylinker; ss.
OS	Synthetic.
XX	
PN	MO200123419-A2.
PD	
PF	05-APR-2001.
XX	
PF	27-SEP-2000; 2000WO-US026582.
XX	
PR	27-SEP-1999; 99US-0156277P.
XX	
PA	(SCIO-) SCIOS INC.
XX	
P1	Stanton LW, Kapoun AM;

XX	WP1: 2001-328177/34.
DR	
XX	Novel secreted factor encoded by clone P00210D09 useful for diagnosing,
PT	treating and/or preventing various cardiac, renal and inflammatory
PT	diseases.
XX	
PS	Example 1, Page 41; 69pp; English.
XX	
CC	The present sequence corresponds to polylinker DNA of the phagemid vector
CC	PC2.1. It was used in the construction of a normalised rat cDNA library,
CC	which was used in an example demonstrating differential expression of a
CC	rat gene referred to as clone P00210D09. The invention relates to a
CC	polypeptide comprising a sequence of at least 80% identity to residues 22
CC	-112 of the present sequence, or a sequence encoded by a nucleic acid
CC	hybridising under stringent conditions to the complement of the coding
CC	region comprising 1031 nucleotides, and having at least one biological
CC	activity of the polypeptide encoded by clone P00210D09. The polypeptides
CC	and polynucleotides of the invention are useful for the treatment of
CC	cardiac, renal and inflammatory diseases. The polynucleotides are useful
CC	in antisense mediated gene inhibition and in gene therapy. The
CC	polypeptides are useful in assays for identifying lead compounds that may
CC	be used as therapeutic agents in the treatment of cardiac, kidney or
CC	inflammatory diseases
SO	
SO	Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match	1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity	88.9%; Pred. No. 4.9e+02;
Matches	16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy	1520 AAAAAAAAAAGTAAAA 1537
Db	18 AAAAAAAAAAAAAAAAAA 1
RESULT 460	
ABQ78729	
ID	ABQ78729 standard; RNA; 18 BP.
XX	
AC	ABQ78729;
XX	
DT	05-DEC-2002 (first entry)
XX	
DE	Nucleotide sequence of a microsporidial RNA gene fragment.
XX	
KW	Encephalitozoon microorganism; drinking water; RNA; ss.
XX	
OS	Nosema ceranae.
XX	
PN	US2002102584-A1.
XX	
PD	01-AUG-2002.
XX	
PF	18-SEP-2001; 2001US-00954225.
XX	
PR	21-SEP-2000; 2000US-0234241P.
XX	
PA	(HEST/) HESTER J D.
XX	(LIND/) LINDQUIST H D A.
PA	(SCHA/) SCHAEFER F W.
XX	
PI	Heester JD, Lindquist HDA, Schaefer FW;
XX	
DR	WP1: 2002-673993/72.
XX	
PT	New Probe for detecting Encephalitozoon protozoans e.g. Encephalitozoon
PT	cuniculi.
XX	
PS	Disclosure; Page 6; 9pp; English.
XX	
CC	ABQ78717-38 represent RNA gene fragments, which were aligned to enable
CC	designing of probes of the invention. The specification describes probes



Query Match 1.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAAA 1537

DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 463

ABST78429/C  
ID ABST78429 standard; DNA; 18 BP.

XX AC ABST78429;

DT 13-DEC-2002 (first entry)

DE Angiogenesis inhibitory oligonucleotide #913.

XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;

KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;

KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;

KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;

KW rubecosis; Osler-Weber Syndrome; myocardial angiogenesis;

KW plaque neovascularization; telangiectasia; haemophilic joint;

KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;

KW scleroderma; hypertrophic scar.

XX OS Synthetic.

XX PN WO200253141-A2.

XX PD 11-JUL-2002.

XX PF 14-DEC-2001; 2001WO-US048458.

XX PR 14-DEC-2000; 2000US-0255534P.

XX PA (COLE-) COLEY PHARM GROUP INC.

XX PI Bratzler RL;

XX PS WPI; 2002-566690/60.

XX PT Inhibiting angiogenesis in a subject, involves administering at least one

PT antiangiogenic nucleic acid molecule to the subject.

XX Claim 2; Page 35; 276pp; English.

XX The invention relates to inhibiting angiogenesis in a subject, comprising

CC administering at least one antiangiogenic nucleic acid molecule. Also

CC included is a kit comprising a first container housing the antiangiogenic

CC nucleic acids, and instructions for administering them to a subject

CC having a condition characterised by unwanted angiogenesis. The method is

CC useful for inhibiting angiogenesis associated with solid tumour growth,

CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,

CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,

CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,

CC rubecosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque

CC neovascularization, telangiectasia, haemophilic joints, angiofibroma,

CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and

CC hypertrophic scars. The present sequence is an antiangiogenic nucleic

CC acid of the invention

XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

SO Query Match 1.1%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 4.9e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAAA 1537

DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 463

ABST78429/C

ID ABST78429 standard; DNA; 18 BP.

XX AC ABST78429;

DT 13-DEC-2002 (first entry)

DE Angiogenesis inhibitory oligonucleotide #913.

XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;

KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;

KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;

KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;

KW rubecosis; Osler-Weber Syndrome; myocardial angiogenesis;

KW plaque neovascularization; telangiectasia; haemophilic joint;

KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;

KW scleroderma; hypertrophic scar.

XX OS Synthetic.

XX PN WO200253141-A2.

XX PD 11-JUL-2002.

XX PF 14-DEC-2001; 2001WO-US048458.

XX PR 14-DEC-2000; 2000US-0255534P.

XX PA (COLE-) COLEY PHARM GROUP INC.

XX PI Bratzler RL;

XX PS WPI; 2002-566690/60.

XX PT Inhibiting angiogenesis in a subject, involves administering at least one

PT antiangiogenic nucleic acid molecule to the subject.

XX Claim 2; Page 35; 276pp; English.

XX The invention relates to inhibiting angiogenesis in a subject, comprising

CC administering at least one antiangiogenic nucleic acid molecule. Also

CC included is a kit comprising a first container housing the antiangiogenic

CC nucleic acids, and instructions for administering them to a subject

CC having a condition characterised by unwanted angiogenesis. The method is

CC useful for inhibiting angiogenesis associated with solid tumour growth,

CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,

CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,

CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,

CC rubecosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque

CC neovascularization, telangiectasia, haemophilic joints, angiofibroma,

CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and

CC hypertrophic scars. The present sequence is an antiangiogenic nucleic

CC acid of the invention

XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

SO Query Match 1.1%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 4.9e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAAA 1537

DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 463

ABST78429/C

ID ABST78429 standard; DNA; 18 BP.

XX AC ABST78429;

DT 13-DEC-2002 (first entry)

DE Angiogenesis inhibitory oligonucleotide #913.

XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;

KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;

KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;

KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;

KW rubecosis; Osler-Weber Syndrome; myocardial angiogenesis;

KW plaque neovascularization; telangiectasia; haemophilic joint;

KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;

KW scleroderma; hypertrophic scar.

XX OS Synthetic.

XX PN WO200253141-A2.

XX PD 11-JUL-2002.

XX PF 14-DEC-2001; 2001WO-US020154.

XX PR 22-JUN-2000; 2000US-0213346P.

XX PA (IOWA ) UNIV IOWA RES FOUND.

XX PI Weiner G, Hartmann G;

XX PS WPI; 2002-154611/20.

XX PT Treating or preventing cancer, such as basal cell carcinoma, comprises

PT administering immunostimulatory nucleic acids that induce expression of

PT cell surface antigens and antibodies to a subject having or at risk of

PT developing cancer.

XX Disclosure; Page 308; 312pp; English.

XX The present invention relates to methods for treating or preventing

CC cancer, involving administering to a subject having or at risk of

CC developing cancer immunostimulatory nucleic acids that induce expression

CC of cell surface antigens and antibodies. The methods are useful for

CC treating or preventing cancer such as basal cell carcinoma, bladder

CC cancer, bone cancer, brain and central nervous system (CNS) cancer,

CC breast cancer, cervical cancer, colon and rectum cancer, connective

CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx

CC cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-

CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian

CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin

CC cancer, stomach cancer, testicular cancer, and uterine cancer. The

CC present sequence is an immunostimulatory oligonucleotide described in the

CC exemplification of the invention

XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

SO Query Match 1.1%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 4.9e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAAA 1537

DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 465

AAD41497/C

```
ID AD41497 standard; DNA; 18 BP.
XX
AC AAD41497;
XX
XX 30-OCT-2002 (first entry)
XX
DE Oligonucleotide used for amplifying sea hare cyplasin L DNA.
XX
XX Apoptosis; ion channel modulator; hyperproliferative disease; tumour;
XX therapy; leukaemia; carcinoma; sarcoma; degenerative disease; melanoma;
XX Alzheimer's disease; Parkinson's disease; arteriosclerosis;
XX heart disease; stroke; vascular disease; neurotropic; neuroprotective;
XX cerebroprotective; cardiac; cytotoxic protein; cyplasin L; ss.
XX
OS Unidentified.
XX
PN WO200231144-A2.
XX
PD 18-APR-2002.
XX
PF 12-OCT-2001; 2001WO-EP011837.
XX
PR 13-OCT-2000; 2000EP-00122466.
XX
PA (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX
PI Butzke D, Machuy N, Rudel T, Meyer TF;
XX
XX WPI; 2002-537205/57.
XX
XX Novel polypeptide having cytotoxic activity obtainable from Aplysia,
XX useful for destroying tumors, for identifying novel targets for the
XX development of anti-tumor agents, and as specific ion channel modulators.
XX
PS Example 5; Page 37; 87pp; English.
XX
XX The present invention relates to novel polypeptides having cytotoxic
XX activity obtainable from sea hare Aplysia. Sequences of the invention are
XX useful for the manufacture of cytotoxic agents against apoptosis-
XX resistant cells, where the agents are useful for diagnosis, prevention,
XX treatment of disorders associated with dysfunctions of GMP-SH3 binding
XX protein, factors for generating or detoxifying reactive oxygen species
XX (ROS) and factors for blocking and/or by-passing of caspases. They are
XX useful for tumour therapy. Cytotoxic proteins of the invention are useful
XX for destroying tumors and/or selectively killing cells in tissues, for
XX identifying novel targets for the development of pharmaceutical agents,
XX preferably anti-tumor agents and as specific ion channel modulators,
XX e.g., blockers or openers for therapy, diagnostic or research. They are
XX useful for the diagnosis and therapy of hyperproliferative diseases,
XX preferably tumours, e.g., leukaemia, carcinoma, sarcoma and melanoma.
XX They are also useful for development of drugs for the treatment of
XX degenerative diseases such as Alzheimer's disease, Parkinson's disease,
XX arteriosclerosis, heart diseases, stroke and vascular diseases. The
XX present sequence is an oligonucleotide which is used for amplifying sea
XX hare cyplasin L DNA. This sequence is used in the exemplification of the
XX invention
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
OY 1520 AAAAAAAAAAGTAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 466
ABSS53437/c
ID ABSS53437 standard; DNA; 18 BP.
XX
AC ABSS53437;
```

```
XX
DT 29-NOV-2002 (first entry)
XX
XX Poly d(T) primer.
DE
XX
XX Terminal continuation; TC; ss; second strand cDNA synthesis; primer;
XX poly d(T).
XX
OS Synthetic.
XX
XX WO200265093-A2.
XX
PD 22-AUG-2002.
XX
XX
PF 14-FEB-2002; 2002WO-US005713.
XX
PR 14-FEB-2001; 2001US-0268645P.
XX
PR 14-FEB-2001; 2001US-0268664P.
XX
PR 18-JUL-2001; 2001US-0306216P.
XX
PR 07-NOV-2001; 2001US-0344557P.
XX
PR 07-NOV-2001; 2001US-0348242P.
XX
PR 09-NOV-2001; 2001US-0350176P.
XX
XX
PA (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
XX (REME-) RES FOUND MENTAL HYGIENE INC.
XX
XX Ginsberg SD, Che S;
XX
XX WPI; 2002-567050/60.
XX
XX
XX Increasing efficiency of second strand cDNA synthesis using terminal
XX continuation model before performing further RNA amplification by RNA
XX transcription.
XX
PS Example 7; Page 80; 128pp; English.
XX
XX This invention relates to a novel method for increasing the efficiency of
XX second strand cDNA synthesis through a mechanism of terminal
XX continuation. In the method an RNA molecule is obtained and a first
XX primer is added that comprises a region that hybridises to a
XX complementary region of the molecule before a second primer is added
XX comprising at least one riboguanine at the 3' end of the primer. A first
XX complementary nucleic acid molecule is synthesised, the RNA molecule and
XX second primer are removed and a second complementary nucleic acid
XX molecule is synthesised to form a second hybrid with an extension product
XX of the third primer bound to the first complementary molecule. The method
XX of the invention is useful for increasing the efficiency of second strand
XX cDNA synthesis and may be used for linear amplification of genetic
XX signals from histologically stained tissue. The present sequence
XX represents a poly d(T) PCR primer used in the method of the invention
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
OY 1520 AAAAAAAAAAGTAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 467
ABA93239/c
ID ABA93239 standard; DNA; 18 BP.
XX
AC ABA93239;
XX
XX 18-APR-2002 (first entry)
DT
XX
DE Adaptor oligonucleotide SEQ ID NO:2.
XX
XX Detection; comparative detection; adaptor; ss.
```

```
XX OS Synthetic.
XX PN JP2001333800-A.
XX PD 04-DEC-2001.
XX PF 30-MAY-2000; 2000JP-00160324.
XX PR 30-MAY-2000; 2000JP-00160324.
XX PA (UNIT-) UNITECH CO LTD.
XX DR WPI; 2002-135950/18.
XX PT Comparative detection of the amounts of RNA and DNA.
XX PS Disclosure; Page 9; 9pp; Japanese.
XX CC The present invention describes a method for the comparative detection of
CC the amount of an RNA. The method comprises: (a) cDNAs obtained by
CC transcribing respectively from at least two tissue RNAs are respectively
CC fragmented by using a same restriction enzyme; (b) each different adaptor
CC and a common adaptor are added to each of the cDNA fragments derived from
CC the same or different tissues by the step (a); (c) the resultant adaptor-
CC added cDNAs are mixed together; (d) an adaptor primer having the common
CC sequence to said different adaptor and a gene-specific adaptor are used
CC to amplify said adaptor-added cDNAs containing no region derived from
CC polyadenylic acid of the mRNA before the addition of the adaptor among
CC the adaptor-added cDNAs prepared by the step (b); (e) the ratios of the
CC cDNA amounts are measured between the tissues; (f) the RNA is detected
CC from the measured result; (g) each different adaptor and a common adaptor
CC are added to each of the genomic DNA fragments derived from a same or
CC different individuals; (h) the resultant adaptor-added genomic DNAs are
CC mixed together; (i) the adaptor-added genomic DNAs are amplified by using
CC an adaptor primer having the common sequence to the different adaptor and
CC a sequence-specific adaptor; and (j) the ratios of the amplified amounts
CC of the genomic DNAs are measured between the individuals. The method is
CC used for the detection of the amounts of RNA and DNA. The present
CC sequence represents an oligonucleotide which is used in the
CC exemplification of the present invention
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 18;
XX Best Local Similarity 88.9%; Pred. No. 4.9e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 468
XX AAD56466
XX ID AAD56466 standard; RNA; 18 BP.
XX AC AAD56466;
XX DT 07-AUG-2003 (first entry)
XX DE Target RNA #1 used in the exemplification of the invention.
XX KW Acyclic linker; gene expression; gene therapy; ss.
XX OS Unidentified.
XX PN WO2003037909-A1.
XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR
```

```
PR 29-OCT-2001; 2001US-0330719P.
XX PA (UTMC-) UNIV MCGILL.
XX PI Damba MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;
XX DR WPI; 2003-421516/39.
XX PT Novel acyclic linker-containing oligonucleotide useful for preventing or
XX decreasing translation, reverse transcription and/or replication of a
XX target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 5; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
XX comprising at least one modified deoxyribonucleotide. Oligonucleotides of
XX the invention are useful for preventing or decreasing translation,
XX reverse transcription and/or replication of a target RNA in a system.
XX They are useful for selectively preventing gene expression in a sequence-
XX specific manner, for hybridising to complementary RNA such as cellular
XX mRNA or viral RNA, to hybridise to and induce cleavage of complementary
XX RNA. They are also useful therapeutically in formulations or medicaments
XX to prevent or treat a disease characterised by the expression of a
XX particular target RNA. The invention is used in gene therapy. The present
XX sequence is a target RNA, used in the exemplification of the invention
XX SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 18;
XX Best Local Similarity 88.9%; Pred. No. 4.9e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18
XX
XX RESULT 469
XX AAD56440/C
XX ID AAD56440 standard; DNA; 18 BP.
XX AC AAD56440;
XX DT 07-AUG-2003 (first entry)
XX DE Antisense oligo #1, to elicit RNase H degradation of target RNA.
XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
XX antisense; ss.
XX OS Unidentified.
XX PN WO2003037909-A1.
XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UTMC-) UNIV MCGILL.
XX PI Damba MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;
XX DR WPI; 2003-421516/39.
XX PT Novel acyclic linker-containing oligonucleotide useful for preventing or
XX decreasing translation, reverse transcription and/or replication of a
XX target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 9; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
```

CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of  
CC the invention are useful for preventing or decreasing translation,  
CC reverse transcription and/or replication of a target RNA in a system.  
CC They are useful for selectively preventing gene expression in a sequence-  
CC specific manner, for hybridising to complementary RNA such as cellular  
CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary  
CC RNA. They are also useful therapeutically in formulations or medicaments  
CC to prevent or treat a disease characterised by the expression of a  
CC particular target RNA. The invention is used in gene therapy. The present  
CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)  
CC H degradation of target RNA. This sequence is used in the exemplification  
CC of the invention  
XX  
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAA 1537  
DB 18 AAAAAAAAAAAAAAAAAA 1  
RESULT 470  
AAD56446/C ID AAD56446 standard; DNA; 18 BP.  
XX  
AC AAD56446;  
XX  
DT 07-AUG-2003 (first entry)  
XX  
XX 2'-ANA antisense oligo #1, to elicit RNase H degradation of target RNA.  
DE  
XX Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;  
KM antisense; ss.  
XX  
OS Unidentified.  
XX  
FH Key location/Qualifiers  
FT modified\_base 1.18  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-deoxy-2'-fluororabinothymidine"  
XX  
XX W02003037909-A1.  
XX  
XX 08-MAY-2003.  
XX  
XX 29-OCT-2002; 2002WO-CA001628.  
XX  
XX 29-OCT-2001; 2001US-0330719P.  
XX  
XX (UTMC-) UNIV MCGILL.  
XX  
XX Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;  
XX WPI; 2003-421516/39.  
XX  
XX Novel acyclic linker-containing oligonucleotide useful for preventing or  
XX decreasing translation, reverse transcription and/or replication of a  
XX target RNA in a system, comprises a modified deoxyribonucleotide.  
XX  
XX Example 2; Fig 7; 104pp; English.  
XX  
XX The invention relates to an acyclic linker-containing oligonucleotide  
XX comprising at least one modified deoxyribonucleotide. Oligonucleotides of  
XX the invention are useful for preventing or decreasing translation,  
XX reverse transcription and/or replication of a target RNA in a system.  
XX They are useful for selectively preventing gene expression in a sequence-  
XX specific manner, for hybridising to complementary RNA such as cellular  
XX mRNA or viral RNA, to hybridise to and induce cleavage of complementary  
XX RNA. They are also useful therapeutically in formulations or medicaments

CC to prevent or treat a disease characterised by the expression of a  
CC particular target RNA. The invention is used in gene therapy. The present  
CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)  
CC H degradation of target RNA. This sequence is used in the exemplification  
CC of the invention  
XX  
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAA 1537  
DB 18 AAAAAAAAAAAAAAAAAA 1  
RESULT 471  
ACH03247/C ID ACH03247 standard; DNA; 18 BP.  
XX  
XX ACH03247;  
XX  
XX 25-SEP-2003 (first entry)  
XX  
XX Immunostimulatory nucleic acid #882.  
DE  
XX  
XX Immunostimulatory; antinflammatory; dermatological; antipsoriatic;  
XX antitumor; gene therapy; vaccine; non-allergic inflammatory disease;  
XX psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
XX inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
XX Synthetic.  
XX  
XX US2003050268-A1.  
XX  
XX 13-MAR-2003.  
XX  
XX 29-MAR-2002; 2002US-00112653.  
XX  
XX 29-MAR-2001; 2001US-0279642P.  
XX  
XX (KRIE/) KRIEG A M.  
XX (BERG/) BERG D J.  
XX  
XX Krieg AM, Berg DJ;  
XX WPI; 2003-521815/49.  
XX  
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
XX allergic contact dermatitis, latex dermatitis or inflammatory bowel  
XX disease by administering an immunostimulatory nucleic acid.  
XX  
XX Disclosure; Page 33; 229pp; English.  
XX  
XX The invention describes a method of treating non-allergic inflammatory  
XX disease comprising administering to a subject having or at risk of  
XX developing a non-allergic inflammatory disease an immunostimulatory  
XX nucleic acid for prevention or treatment of the disease. The method is  
XX useful for treating non-allergic inflammatory diseases, such as  
XX psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
XX inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
XX This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAA 1537  
DB 18 AAAAAAAAAAAAAAAAAA 1

```
RESULT 472
ADA27361
ID ADA27361 standard; DNA; 18 BP.
AC ADA27361;
XX
XX 20-NOV-2003 (first entry)
DE Human microsatellite repeat M2_3_8.
XX
XX da; HLA-related research; HLA class II-associated disease;
KW transplantation matching; recombination hot spot identification;
KW linkage disequilibrium study; human; microsatellite.
XX
XX Homo sapiens.
OS
XX US2003108940-A1.
XX
XX 12-JUN-2003.
XX
XX 06-DEC-2002; 2002US-00314405.
XX
XX 15-NOV-2000; 2000US-00713616.
XX
XX (INOK/) INOKO H.
XX
XX Inoko H, Tamiya G, Matsuzaka Y;
XX
XX WPI; 2003-616782/58.
XX
XX New oligonucleotide primer capable of specifically hybridizing to a DNA
XX having the sequence of the flanking regions of a microsatellite (e.g.
XX M249), useful for HLA-related research, e.g. transplantation matching.
XX
XX Example 2; Page 5; 20pp; English.
XX
XX The invention relates to an oligonucleotide primer capable of
XX specifically hybridizing to a DNA having the sequence of the flanking
XX regions of a microsatellite selected from M2-4-9, M2-2-9, M2-2-12, M2-3-
XX 11, M2-2-20, M2-2-21, M2-2-22, M2-2-23, M2-4-25, M2-4-26, M2-2-
XX 22, M2-2-32, M2-4-33, M2-4-37, M2-3-22, M2-2-36, M2-5-11, M2-2-
XX 46, and M2-2-48. The primer is useful for determining the number of
XX repeat units of the microsatellite cited above. The primer is useful in
XX HLA-related research, such as genetic mapping of HLA class II-associated
XX diseases, transplantation matching, population genetics, and
XX identification of recombination hot spots as well as linkage
XX disequilibrium studies. The present sequence represents the human
XX microsatellite repeat M2_3_8.
XX
XX Sequence 18 BP; 0 A; 6 C; 12 G; 0 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 18;
XX Best Local Similarity 88.9%; Pred. No. 4.9e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 427 GCGGCTCGCGCGCGCGC 444
DB 1 GCGGCGCGCGCGCGCGC 18
RESULT 473
AAD57871/C
ID AAD57871 standard; DNA; 18 BP.
XX
XX AAD57871;
AC
XX
XX 20-NOV-2003 (first entry)
DE Antisense oligo #1 used in the exemplification of the invention.
XX
XX Antisense oligo #1 used in the exemplification of the invention.
XX
XX Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
KW
```

```
KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; ss.
XX
XX Unidentified.
XX
XX WO2003064441-A2.
XX
XX 07-AUG-2003.
XX
XX 31-JAN-2003; 2003WO-CA000129.
XX
XX 01-FEB-2002; 2002US-0352873P.
XX
XX (UYWC-) UNIV MCGILL.
XX
XX Damha MJ, Parniak MA;
XX
XX WPI; 2003-689523/65.
XX
XX New oligonucleotide, useful for preventing or treating a disease related
XX to a target RNA in a system, e.g., AIDS or hepatitis B.
XX
XX Example 2; Page 35; 73pp; English.
XX
XX The present invention relates to a new oligonucleoside which comprises
XX alternating first and second segments. The first segment comprises at
XX least one sugar modified nucleoside. The second segment comprises at
XX least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
XX each of the first and second segments, so that it comprises at least 4
XX alternating segments. The oligonucleotide is useful for preparing a
XX composition for inducing RNase H-mediated cleavage of a target RNA in a
XX system, preventing or decreasing translation, transcription or
XX replication of a target RNA in a system, detecting the presence of a
XX target RNA in a system, validating a gene target corresponding to a
XX target RNA in a system or preventing or treating a disease related to a
XX target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
XX or hepatitis B. The invention is useful in gene therapy. The present
XX sequence is an antisense oligonucleotide used in the exemplification of
XX the invention.
XX
XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
SQ
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 18;
XX Best Local Similarity 88.9%; Pred. No. 4.9e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 1520 AAAAAAAAAAGTAAAA 1537
DB 18 AAAAAAAAAAAAAAAAAA 1
RESULT 474
AAD57878/C
ID AAD57878 standard; DNA; 18 BP.
XX
XX AAD57878;
AC
XX
XX 20-NOV-2003 (first entry)
DE Antisense DNA-RNA hybrid #2 used in the exemplification of the invention.
XX
XX Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RNA hybrid;
KW ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX PH 1..3
XX FT /tag= a
XX FT /label= RNA
XX FT /note= "2'-O-methyl-D-uridine"
XX FT 7..9
XX FT /*tag= b
XX
```

```
FT FT /label= RNA
FT FT /note= "2'-O-methyl-D-uridine"
FT FT 13. .15
FT FT /*tag= c
FT FT /label= RNA
FT FT /note= "2'-O-methyl-D-uridine"
XX PN WO2003064441-A2.
XX PD 07-AUG-2003.
XX PF 31-JAN-2003; 2003WO-CA000129.
XX PR 01-FEB-2002; 2002US-0352873P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Parniak MA;
XX DR WPI; 2003-689523/65.
XX PT New oligonucleotide, useful for preventing or treating a disease related
XX PS to a target RNA in a system, e.g., AIDS or hepatitis B.
XX PS Example 2; Page 35; 73pp; English.
XX CC The present invention relates to a new oligonucleoside which comprises
XX CC alternating first and second segments. The first segment comprises at
XX CC least one sugar modified nucleoside. The second segment comprises at
XX CC least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
XX CC each of the first and second segments, so that it comprises at least 4
XX CC alternating segments. The oligonucleoside is useful for preparing a
XX CC composition for inducing RNase H-mediated cleavage of a target RNA in a
XX CC system, preventing or decreasing translation, transcription or
XX CC replication of a target RNA in a system, detecting the presence of a
XX CC target RNA in a system, validating a gene target corresponding to a
XX CC target RNA in a system or preventing or treating a disease related to a
XX CC target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
XX CC or hepatitis B. The invention is useful in gene therapy. The present
XX CC sequence is an antisense DNA-RNA hybrid used in the exemplification of
XX CC the invention
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 9 T; 9 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 18;
XX Best Local Similarity 88.9%; Pred. No. 4.9e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 475
AADS7879/c
ID AADS7879 standard; DNA; 18 BP.
XX AC AADS7879;
XX DT 20-NOV-2003 (first entry)
XX DE Antisense DNA-RNA hybrid #3 used in the exemplification of the invention.
XX KW Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
XX KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RNA hybrid;
XX KW ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX FT 1. .6
XX FT /*tag= a
XX FT /label= RNA
XX FT /label= RNA
```

```
FT FT /note= "2'-O-methyl-D-uridine"
FT FT 13. .18
FT FT /*tag= b
FT FT /label= RNA
FT FT /note= "2'-O-methyl-D-uridine"
XX PN WO2003064441-A2.
XX PD 07-AUG-2003.
XX PF 31-JAN-2003; 2003WO-CA000129.
XX PR 01-FEB-2002; 2002US-0352873P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Parniak MA;
XX DR WPI; 2003-689523/65.
XX PT New oligonucleotide, useful for preventing or treating a disease related
XX PS to a target RNA in a system, e.g., AIDS or hepatitis B.
XX PS Example 2; Page 35; 73pp; English.
XX CC The present invention relates to a new oligonucleoside which comprises
XX CC alternating first and second segments. The first segment comprises at
XX CC least one sugar modified nucleoside. The second segment comprises at
XX CC least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
XX CC each of the first and second segments, so that it comprises at least 4
XX CC alternating segments. The oligonucleoside is useful for preparing a
XX CC composition for inducing RNase H-mediated cleavage of a target RNA in a
XX CC system, preventing or decreasing translation, transcription or
XX CC replication of a target RNA in a system, detecting the presence of a
XX CC target RNA in a system, validating a gene target corresponding to a
XX CC target RNA in a system or preventing or treating a disease related to a
XX CC target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
XX CC or hepatitis B. The invention is useful in gene therapy. The present
XX CC sequence is an antisense DNA-RNA hybrid used in the exemplification of
XX CC the invention
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 6 T; 12 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 18;
XX Best Local Similarity 88.9%; Pred. No. 4.9e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 476
AADS7877/c
ID AADS7877 standard; DNA; 18 BP.
XX AC AADS7877;
XX DT 20-NOV-2003 (first entry)
XX DE Antisense DNA-RNA hybrid #1 used in the exemplification of the invention.
XX KW Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
XX KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RNA hybrid;
XX KW ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX FT 1
XX FT /*tag= a
XX FT /label= RNA
XX FT /label= "2'-O-methyl-D-uridine"
```



FT	m1sc_RNA	3	/*rag= b
FT		/label= RNA	
FT		/note= "2'-O-methyl-D-uridine"	
FT	m1sc_RNA	5	/*rag= c
FT		/label= RNA	
FT		/note= "2'-O-methyl-D-uridine"	
FT	m1sc_RNA	7	/*rag= d
FT		/label= RNA	
FT		/note= "2'-O-methyl-D-uridine"	
FT	m1sc_RNA	9	/*rag= e
FT		/label= RNA	
FT		/note= "2'-O-methyl-D-uridine"	
FT	m1sc_RNA	11	/*rag= f
FT		/label= RNA	
FT		/note= "2'-O-methyl-D-uridine"	
FT	m1sc_RNA	13	/*rag= g
FT		/label= RNA	
FT		/note= "2'-O-methyl-D-uridine"	
FT	m1sc_RNA	15	/*rag= h
FT		/label= RNA	
FT		/note= "2'-O-methyl-D-uridine"	
FT	m1sc_RNA	17	/*rag= i
FT		/label= RNA	
FT		/note= "2'-O-methyl-D-uridine"	
NN			

PD	07-AUG-2003.
XX	
PF	31-JAN-2003; 2003WC-CA000129.
XX	
PR	01-FEB-2002; 2002US-0352873P.
XX	
PA	(UYWC-) UNIV MCGILL.
XX	
PI	Damha MJ; Parniak MA;
XX	
DR	WPI; 2003-689523/65.
XX	
PT	New oligonucleotide, useful for preventing or treating a disease related
XX	to a target RNA in a system, e.g., AIDS or hepatitis B.
XX	
PS	Example 2; Page 35; 73pp; English.
XX	
CC	The present invention relates to a new oligonucleoside which comprises
CC	alternating first and second segments. The first segment comprises at
CC	least one sugar modified nucleoside. The second segment comprises at
CC	least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
CC	each of the first and second segments, so that it comprises at least 4
CC	alternating segments. The oligonucleoside is useful for preparing a
CC	composition for inducing RNase H-mediated cleavage of a target RNA in a
CC	system, preventing or decreasing translation, transcription or
CC	replication of a target RNA in a system, detecting the presence of a
CC	target RNA in a system, validating a gene target corresponding to a
CC	target RNA in a system or preventing or treating a disease related to a
CC	target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
CC	or hepatitis B. The invention is useful in gene therapy. The present
CC	sequence is an antisense DNA-RNA hybrid used in the exemplification of
CC	the invention

SQ Sequence 18 BP; 0 A; 0 C; 0 G; 9 T; 9 U; 0 Other;  
 Query Match 1.1%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0

Qy	1520	AAAAAAAAAACTAAAA	1537
Db	18	AAAAAAAAAAAAAAAAAA	1

RESULT 477  
AAD57890  
ID AAD57890 standard; RNA; 18 BP.

DT 20-NOV-2003 (first entry)

Target RNA #1 used in RNase H assay.

KM Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS,  
KM hepatitis B: gene therapy; virucide; anti-HIV; ss.

OS Unidentified.

PN WO2003064441-A2.

PD 07-AUG-2003.

PF 31-JAN-2003; 2003WO-CA000129.

PR 01-FEB-2002; 2002US-0352873P.

PA (UYMC-) UNIV MCGILL.

PI Damha MJ, Parniak MA;

WPI; 2003-689523/65.

PT New oligonucleotide, useful for preventing or treating a disease related  
PT to a target RNA in a system, e.g., AIDS or hepatitis B.  
PT

PS Example 4; Page 38; 73pp; English.

CC The present invention relates to a new oligonucleotide which comprises  
CC alternating first and second segments. The first segment comprises at  
CC least one sugar modified nucleoside. The second segment comprises at  
CC least one 2'-deoxynucleoside. The oligonucleotide comprises at least 2 of  
CC each of the first and second segments, so that it comprises at least 4  
CC alternating segments. The oligonucleotide is useful for preparing a  
CC composition for inducing RNase H-mediated cleavage of a target RNA in a  
CC system, preventing or decreasing translation, transcription or  
CC replication of a target RNA in a system, detecting the presence of a  
CC target RNA in a system, validating a gene target corresponding to a  
CC target RNA in a system or preventing or treating a disease related to a  
CC target RNA in a system, e.g., acquiring immune deficiency syndrome (AIDS)  
CC or hepatitis B. The invention is useful in gene therapy. The present  
CC sequence is a target RNA used in RNase H assay. This sequence is used in  
CC the exemplification of the invention

Query Match	1.1%	Score	14.8	DB 1	Length	18			
Best Local Similarity	88.9%	Pred. No.	4.9e+02						
Matches	16	Conservative	0	Mismatches	2	Indels	0	Gaps	0

```
QY      1520 AAAAAAAAAAGTAAAA 1537  
          |||||  
Db       1 AAAAAAAAAAAAAAAA 18
```

**RESULT 478**

ID ADB37210 standard; DNA; 18 BP.

AC ADB37210;

XX

DT 04-DEC-2003 (first entry)  
XX Immunostimulatory nucleic acid #824.  
DE  
XX  
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KW hypo-responsive subject; immunostimulatory.  
XX  
OS Synthetic.  
XX  
XX US2003087848-A1.  
XX  
XX 08-MAY-2003.  
XX  
XX 02-FEB-2001; 2001US-00776479.  
XX  
XX 03-FEB-2000; 2000US-0179991P.  
XX  
XX (BRATZLER R L.  
PA (PETE//) PETERSEN D M.  
PA (FOUR//) FOURON Y.  
XX  
XX Bratzler RL, Petersen DM, Fouron Y;  
PI  
XX WPI; 2003-657977/62.  
XX  
XX Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
XX Disclosure; Page 17; 221pp; English.  
XX  
XX The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 18 AAAAAAAAAAAAAAAAAA 1  
RESULT 479  
ADB37236/C  
ID ADB37236 standard; DNA; 18 BP.  
XX  
XX ADB37236;  
AC  
XX 04-DEC-2003 (first entry)  
DT  
XX  
XX Immunostimulatory nucleic acid #850.  
DE  
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KW hypo-responsive subject; immunostimulatory.  
XX  
XX Synthetic.  
OS  
XX US2003087848-A1.  
XX  
XX 08-MAY-2003.  
PD  
XX  
XX 02-FEB-2001; 2001US-00776479.  
XX  
XX 03-FEB-2000; 2000US-0179991P.  
XX  
XX (BRATZLER R L.  
PA (PETE//) PETERSEN D M.  
PA

PA (FOUR//) FOURON Y.  
XX  
XX Bratzler RL, Petersen DM, Fouron Y;  
PI  
XX WPI; 2003-657977/62.  
XX  
XX Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
XX Disclosure; Page 18; 221pp; English.  
XX  
XX The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 18 AAAAAAAAAAAAAAAAAA 1  
RESULT 480  
ADE77617  
ID ADE77617 standard; DNA; 18 BP.  
XX  
XX ADE77617;  
AC  
XX 29-JAN-2004 (first entry)  
DT  
XX  
XX Human probe NEG for elongation mediated multiplexed analysis of HLA-DR.  
DE  
XX probe; ss; negative control; C/PT; human leukocyte antigen; HLA;  
KW genetic testing; carrier screening; genotyping; profiling; polymorphic;  
KW multiplexed elongation assay; enzymatic recognition;  
KW cystic fibrosis conductance transmembrane regulator.  
XX  
XX Synthetic.  
OS  
XX Homo sapiens.  
XX  
XX WO2003034029-A2.  
XX  
XX 24-APR-2003.  
PD  
XX  
XX 15-OCT-2002; 2002WO-US033012.  
XX  
XX 15-OCT-2001; 2001US-0329427P.  
XX  
XX 15-OCT-2001; 2001US-0329428P.  
XX  
XX 15-OCT-2001; 2001US-0329619P.  
XX  
XX 15-OCT-2001; 2001US-0329620P.  
XX  
XX 14-MAR-2002; 2002US-0364416P.  
XX  
XX (BIOA-) BIOARRAY SOLUTIONS LTD.  
XX  
XX Li AX, Hashmi G, Seul M;  
PI  
XX WPI; 2003-393553/37.  
XX  
XX Concurrent interrogation of a number of polymorphic sites, useful for  
PT genetic testing, carrier screening, genetic profiling, and identity  
PT testing, comprises conducting a multiplexed elongation assay using  
PT probes.  
XX  
XX Example 9; Page 46; 143pp; English.  
XX  
XX This invention relates to a novel method for the concurrent interrogation  
CC

CC of a number of polymorphic sites in the presence of, and without  
CC interference from, non-designated polymorphic sites. Specifically, it  
CC comprises conducting a multiplexed elongation assay by applying one or  
CC more temperature cycles to achieve linear amplification of the target or  
CC a combination of annealing and elongation steps under temperature-  
CC controlled conditions. Furthermore, this detection method uses probe  
CC extension or elongation and relies on enzymatic recognition. The  
CC technique that no longer depends on differential hybridisation. The  
CC present invention describes probes and methods useful for identifying or  
CC detecting polymorphisms at one or more designated sites, such that they  
CC can identify mutations within the cyclic fibrosis conductance  
CC transmembrane regulator (CFTR) or the human leukocyte antigen (HLA)  
CC genes. In addition, concurrent interrogation of a multiplicity of  
CC polymorphic sites is useful for genetic testing, carrier screening,  
CC genotyping or genetic profiling, and identity testing. This  
CC oligonucleotide is the negative control probe used for the elongation  
CC mediated multiplexed analysis of HLA-DR, in an exemplification of the  
CC invention.

SO Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 4.9e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537

DB 1 AAAAAAAAAAAAAAAAAA 18

RESULT 481  
AD134489/C

ID AD134489 standard; DNA; 18 BP.

AC AD134489;

DT 22-APR-2004 (first entry)

DE Nucleotide sequence of an oligo dT18.

XX Nucleic acid amplification; RNA transcription; RNA polymerase; ss.

OS Synthetic.

XX WO2003102243-A1.

XX 11-DEC-2003.

XX 30-MAY-2003; 2003WO-US017103.

XX 31-MAY-2002; 2002US-0384454P.

XX (JANNC ) JANSEN PHARM NV.

XX Kamme FC, Zhu JY;

XX WPI; 2004-035466/03.

PT Amplifying for RNA in a sample, useful for improving RNA polymerase based  
PT RNA transcription from a polynucleotide template, comprises eliminating  
PT single-stranded oligonucleotide from the transcription sample.

XX Example 1; SEQ ID NO 8; 26bp; English.

XX The invention relates to amplifying for RNA in a sample comprises  
CC eliminating single-stranded oligonucleotide from the transcription  
CC sample. The method involves synthesizing single-stranded cDNA by  
CC incubating the sample RNA with reverse transcriptase and an  
CC oligonucleotide primer that primes synthesis in a direction toward 5' end  
CC of the RNA; converting the single-stranded cDNA into double-stranded cDNA  
CC to form a transcription sample containing a cDNA template; eliminating  
CC single-stranded oligonucleotide from the transcription sample; and  
CC transcribing the cDNA template into RNA using an RNA polymerase. The

CC method is useful for improving RNA polymerase based RNA transcription  
CC from a polynucleotide template. The method inhibits the undesired non-  
CC template derived production of RNA in the transcription reaction.  
CC Sequences AD134483-AD134489 represent oligonucleotides used in a T7 RNA  
CC transcription reaction.

SO Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 4.9e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537

DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 482  
ADH78590

ID ADH78590 standard; DNA; 18 BP.

AC ADH78590;

DT 22-APR-2004 (first entry)

DE Test element oligonucleotide #2.

XX Fluid functional property; fluid flow pattern;

XX Fluid reagent distribution; time dependent fluid reactivity; ss.

OS Synthetic.

XX US2003232343-A1.

XX 18-DEC-2003.

XX 14-JUN-2002; 2002US-00172675.

XX 14-JUN-2002; 2002US-00172675.

XX (LEBR/) LEBROUST E M.

XX (AMOR/) AMORESE D A.

XX (PECK/) PECK B J.

XX Leproust EM, Amorese DA, Peck BJ;

XX WPI; 2004-061269/06.

PT Determining a functional property of fluid in chamber by introducing a  
PT support comprising test elements having reaction and detection domains,  
PT introducing a test fluid, and detecting locations not reactive with the  
PT fluid.

XX Example 2; SEQ ID NO 2; 22bp; English.

XX The invention relates to a method of determining a functional property of  
CC a fluid in a chamber comprising introducing into the chamber a support to  
CC which is bound several test elements, each of the test elements  
CC comprising a reaction domain and a detection domain, introducing into the  
CC chamber a fluid that is interactive with the reaction domains, removing  
CC the fluid from the chamber, determining by means of the detection domains  
CC the locations at which the fluid has not interacted with the reaction  
CC domains, and relating the locations to the functional property of the  
CC fluid. The reaction domains involves nucleotides. The detection domain  
CC comprises a member of a specific binding pair. The determining of the  
CC step involves treating the test elements to modify only those reaction  
CC domains that have interacted with the fluid. The functional property is  
CC chosen from the flow pattern of the fluid, reagent distribution within  
CC the fluid and time dependent reactivity of the fluid. The method is  
CC useful for determining a functional property of a fluid in a chamber and  
CC for synthesizing arrays of biopolymers e.g., arrays of polynucleotides.  
CC The method provides for the characterisation of a new fluid in a known  
CC flow cell, a known fluid in a new flow cell or a new fluid/flow cell

```
CC combination. This sequence represents a test element used in the method
CC of the invention.
CC
XX
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 1520 AAAAAAAAAAGTAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18
RESULT 483
ADO28710
ID ADO28710 standard; DNA; 18 BP.
AC ADO28710;
DT 15-JUL-2004 (first entry)
DE Single stranded cDNA production poly-A-tail seqid 6.
XX
XX single stranded cDNA; adaptor-mediated process; cDNA synthesis;
XX poly-A-tail; ss.
XX Synthetic.
XX US6706476-B1.
XX 16-MAR-2004.
XX 09-MAR-2001; 2001US-00803263.
XX 22-AUG-2000; 2000US-0226954P.
XX (AZIG-) AZIG BIOSCIENCE AS.
XX Thirstrup K, Marthoe P, Petersson NB;
PI WPI; 2004-326403/30.
XX
XX The invention describes a method of synthesizing single stranded cDNA by
XX a 5'-ligated adaptor-mediated process involving: annealing a cDNA
XX synthesis primer to RNA, separating the cDNA strand from the RNA,
XX purifying the cDNA, contacting the cDNA with an adaptor, ligating the
XX adaptor through 5'-phosphate on strand (II) of the adaptor to single
XX stranded using DNA ligase, and amplifying the obtained ligated single
XX stranded fragment in an molecular amplification procedure. The method is
XX useful for: synthesizing a single stranded cDNA by a 5'-ligated adaptor-
XX mediated process, where the source of nucleic acid is chosen from blood,
XX serum, plasma, cerebrospinal fluid, urine, tissue samples, biopsies and
XX saliva. The tissue sample comprises a cell population which may be single
XX cell, 100-1000000 cells or more as desired; making a cDNA library from a
XX collection of mRNA molecules in a sample, where the method is applied to
XX amplify the cDNAs corresponding to the mRNAs by annealing one or more
XX cDNA synthesis primers to several mRNAs in the sample; producing a
XX subtractive hybridisation probe which involves synthesizing a double-
XX stranded cDNA collection from a first mRNA population by the method,
XX where primer 1 is modified by biotin in the 5' end; isolating the biotin-
XX containing single stranded cDNA (sense) by use of streptavidin coated
XX magnetic beads, synthesising a double-stranded cDNA collection from a
XX second mRNA population according to the method, isolating the non-biotin-
XX containing single stranded cDNA (anti-sense) by use of streptavidin
XX coated magnetic beads, hybridising the sense to the anti-sense cDNA,
```

```
CC where an unhybridised sub-population of the anti-sense cDNA is found,
CC isolating the unhybridised sub-population of the antisense cDNA by use of
CC streptavidin coated cDNA, and generating a second double-stranded cDNA
CC collection from the unhybridised sub-population by PCR using primer 1 and
CC primer 2; and detecting expression of a gene in a pre-selected cell
CC population. The method is an improved method for producing amplified
CC heterogeneous populations of cDNA from limited quantities of RNA or other
CC nucleic acid. This sequence represents a poly-A-tail used to in the
CC production single stranded cDNA.
CC
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 1520 AAAAAAAAAAGTAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18
RESULT 484
ADO28711/c
ID ADO28711 standard; DNA; 18 BP.
AC ADO28711;
DT 15-JUL-2004 (first entry)
DE Single stranded cDNA production poly-A-tail complement seqid 7.
XX
XX single stranded cDNA; adaptor-mediated process; cDNA synthesis;
XX poly-A-tail; ss.
XX Synthetic.
XX US6706476-B1.
XX 16-MAR-2004.
XX 09-MAR-2001; 2001US-00803263.
XX 22-AUG-2000; 2000US-0226954P.
XX (AZIG-) AZIG BIOSCIENCE AS.
XX Thirstrup K, Marthoe P, Petersson NB;
PI WPI; 2004-326403/30.
XX
XX The invention describes a method of synthesizing single stranded cDNA by
XX a 5'-ligated adaptor-mediated process involving: annealing a cDNA
XX synthesis primer to RNA, separating the cDNA strand from the RNA,
XX purifying the cDNA, contacting the cDNA with an adaptor, ligating the
XX adaptor through 5'-phosphate on strand (II) of the adaptor to single
XX stranded using DNA ligase, and amplifying the obtained ligated single
XX stranded fragment in an molecular amplification procedure. The method is
XX useful for: synthesizing a single stranded cDNA by a 5'-ligated adaptor-
XX mediated process, where the source of nucleic acid is chosen from blood,
XX serum, plasma, cerebrospinal fluid, urine, tissue samples, biopsies and
XX saliva. The tissue sample comprises a cell population which may be single
XX cell, 100-1000000 cells or more as desired; making a cDNA library from a
XX collection of mRNA molecules in a sample, where the method is applied to
XX amplify the cDNAs corresponding to the mRNAs by annealing one or more
XX cDNA synthesis primers to several mRNAs in the sample; producing a
XX subtractive hybridisation probe which involves synthesizing a double-
```

CC stranded cDNA collection from a first mRNA population by the method,  
CC where primer 1 is modified by biotin in the 5' end, isolating the biotin-  
CC containing single stranded cDNA (sense) by use of streptavidin coated  
CC magnetic beads, synthesising a double-stranded cDNA collection from a  
CC second mRNA population according to the method, isolating the non-biotin-  
CC containing single stranded cDNA (anti-sense) by use of streptavidin  
CC coated magnetic beads, hybridising the sense to the anti-sense cDNA,  
CC where an unhybridised sub-population of the anti-sense cDNA is found,  
CC isolating the unhybridised sub-population of the antisense cDNA by use of  
CC streptavidin coated cDNA, and generating a second double-stranded cDNA  
CC collection from the unhybridised sub-population by PCR using primer 1 and  
CC primer 2; and detecting expression of a gene in a pre-selected cell  
CC population. The method is an improved method for producing amplified  
CC heterogeneous populations of cDNA from limited quantities of RNA or other  
CC nucleic acid. This sequence represents the complement of a poly-A-tail  
CC used to in the production single stranded cDNA.

SO Sequence 18 BP; 0 A; 0 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1520 AAAAAAAAAAAGTAAA 1537  
18 AAAAAAAAAAAAAAAAAA 1

RESULT 485  
ADO26654  
ID ADO26654 standard; DNA; 18 BP.

AC ADO26654;  
DT 12-AUG-2004 (first entry)

DE Synthetic leader sequence encoding DNA SEQ ID NO:47.  
XX phenotype; phenotypic preference; phenotype modulation; leader; ds.  
KW Synthetic.  
OS  
XX WO2004042059-A1.  
PN  
XX 21-MAY-2004.  
PD  
XX 10-NOV-2003; 2003WO-AU001487.  
PF  
XX 08-NOV-2002; 2002US-0425163P.  
PR  
XX (UYOU ) UNIV QUEENSLAND.  
PA  
XX  
XX Frazer IH;  
PI  
XX  
XX MPI: 2004-411519/38.  
DR P-PSDB; ADO26655.

PT Constructing synthetic polynucleotide for modulating the quality of a  
PT selected phenotype displayed by an organism comprises replacing a first  
PT codon with a synonymous codon to construct the synthetic polynucleotide.  
XX  
XX Example 1; SEQ ID NO 47; 86pp; English.

XX The present invention describes a method for constructing a synthetic  
XX polynucleotide from which a polypeptide is producible to confer a  
XX selected phenotype to an organism of interest or part in a different  
XX quality than that conferred by a parent polynucleotide that encodes the  
XX same polypeptide. The method comprises: (a) selecting a first codon of  
XX the parent polynucleotide for replacement with a synonymous codon, where  
XX the synonymous codon is selected on the basis that it exhibits a  
XX different phenotypic preference than the first codon in a comparison of  
XX phenotypic preferences in test organisms or parts, where the test  
XX organism are selected from organisms of the same species as the organism

CC of interest and organisms that are related to the organisms of interest;  
CC and (b) replacing the first codon with the synonymous codon to construct  
CC the synthetic polynucleotide. Also described: (1) a method for  
CC determining the phenotypic preference of a first codon in an organism of  
CC interest or its parts; (2) a synthetic polynucleotide constructed from  
CC the method above; (3) an organism or interest or part containing a  
CC synthetic polynucleotide constructed from the method above; (4) an  
CC organism or interest or part containing a synthetic construct that  
CC comprises a regulatory polynucleotide operably linked to a tandem repeat  
CC of a first codon fused in frame with a reporter polynucleotide that  
CC encodes a reporter protein, which produces, or is predicted to produce a  
CC selected phenotype or a phenotype of the same class as the selected  
CC phenotype in the organism or part; (5) a method of modulating the quality  
CC of a selected phenotype that is displayed by an organism of interest or  
CC part and that results from the expression of a parent polynucleotide that  
CC encodes the polypeptide; (6) a method of enhancing the quality of a  
CC selected phenotype that is displayed by an organism of interest or part  
CC and that results from the expression of a parent polynucleotide that  
CC encodes the polypeptide; and (7) a method of reducing the quality of a  
CC selected phenotype that is displayed by an organism of interest or part  
CC and that results from the expression of a parent polynucleotide that  
CC encodes the polypeptide. The method is useful for constructing a  
CC synthetic polynucleotide from which a polypeptide is producible to confer  
CC a selected phenotype to an organism of interest or part in a different  
CC quality than that conferred by a parent polynucleotide that encodes the  
CC same polypeptide. It is useful for modulating the quality of a selected  
CC phenotype displayed by an organism or part. The present sequence encodes  
CC a synthetic leader sequence, which is used in an example from the present  
CC invention.

SO Sequence 18 BP; 0 A; 6 C; 12 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 426 GGCGGCTGCGCGCGGC 443  
1 GGCGGCGCGCGCGCGGC 18

Db 1 GGCGGCGCGCGCGCGGC 18

RESULT 486  
ADO26684/C  
ID ADO26684 standard; DNA; 18 BP.

AC ADO26684;  
DT 12-AUG-2004 (first entry)

DE Synthetic leader sequence encoding DNA SEQ ID NO:77.  
XX phenotype; phenotypic preference; phenotype modulation; leader; ds.  
KW Synthetic.  
OS  
XX WO2004042059-A1.  
PN  
XX 21-MAY-2004.  
PD  
XX 10-NOV-2003; 2003WO-AU001487.  
PF  
XX 08-NOV-2002; 2002US-0425163P.  
PR  
XX (UYOU ) UNIV QUEENSLAND.  
PA  
XX  
XX Frazer IH;  
PI  
XX  
XX MPI: 2004-411519/38.  
DR P-PSDB; ADO26685.

PT Constructing synthetic polynucleotide for modulating the quality of a  
PT selected phenotype displayed by an organism comprises replacing a first  
PT codon with a synonymous codon to construct the synthetic polynucleotide.

```

XX Example 1; SEQ ID NO 77; 86bp; English.
PS
CC The present invention describes a method for constructing a synthetic
CC polynucleotide from which a polypeptide is producible to confer a
CC selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. The method comprises: (a) selecting a first codon of
CC the parent polynucleotide for replacement with a synonymous codon, where
CC the synonymous codon is selected on the basis that it exhibits a
CC different phenotypic preference than the first codon in a comparison of
CC phenotypic preferences in test organisms or parts, where the test
CC organism are selected from organisms of the same species as the organism
CC of interest and organisms that are related to the organisms of interest;
CC and (b) replacing the first codon with the synonymous codon to construct
CC the synthetic polynucleotide. Also described: (1) a method for
CC determining the phenotypic preference of a first codon in an organism of
CC interest or its parts; (2) a synthetic polynucleotide constructed from
CC the method above; (3) an organism or interest or part containing a
CC synthetic polynucleotide constructed from the method above; (4) an
CC organism of interest or part containing a synthetic construct that
CC comprises a regulatory polynucleotide operably linked to a tandem repeat
CC of a first codon fused in frame with a reporter polynucleotide that
CC encodes a reporter protein, which produces, or is predicted to produce a
CC selected phenotype or a phenotype of the same class as the selected
CC phenotype in the organism or part; (5) a method of modulating the quality
CC of a selected phenotype that is displayed by an organism of interest or
CC part and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; (6) a method of enhancing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; and (7) a method of reducing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotype displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
CC invention.
CC
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
DB 18 AAAAAAAAAAAAAAAAAA 1
RESULT 487
ADO26616/C
ID ADO26616 standard; DNA; 18 BP.
XX
AC ADO26616;
XX
DT 12-AUG-2004 (first entry)
XX
DE Synthetic leader sequence encoding DNA SEQ ID NO:9.
XX
KM phenotype; phenotypic preference; phenotype modulation; leader; ds.
XX
OS Synthetic.
XX
PN MO2004042059-A1.
XX
PD 21-MAY-2004.
XX
PF 10-NOV-2003; 2003WO-AU001487.

```

```

XX
PR 08-NOV-2002; 2002US-0425163P.
XX
PA (UNYQU ) UNIV QUEBENS LAND.
XX
PI Frazer IH;
XX
DR WPI; 2004-411519/38.
XX
DR P-PSDB; ADO26617.
XX
PT Constructing synthetic polynucleotide for modulating the quality of a
PT selected phenotype displayed by an organism comprises replacing a first
PT codon with a synonymous codon to construct the synthetic polynucleotide.
PS
XX Example 1; SEQ ID NO 9; 86bp; English.
XX
CC The present invention describes a method for constructing a synthetic
CC polynucleotide from which a polypeptide is producible to confer a
CC selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. The method comprises: (a) selecting a first codon of
CC the parent polynucleotide for replacement with a synonymous codon, where
CC the synonymous codon is selected on the basis that it exhibits a
CC different phenotypic preference than the first codon in a comparison of
CC phenotypic preferences in test organisms or parts, where the test
CC organism are selected from organisms of the same species as the organism
CC of interest and organisms that are related to the organisms of interest;
CC and (b) replacing the first codon with the synonymous codon to construct
CC the synthetic polynucleotide. Also described: (1) a method for
CC determining the phenotypic preference of a first codon in an organism of
CC interest or its parts; (2) a synthetic polynucleotide constructed from
CC the method above; (3) an organism or interest or part containing a
CC synthetic polynucleotide constructed from the method above; (4) an
CC organism of interest or part containing a synthetic construct that
CC comprises a regulatory polynucleotide operably linked to a tandem repeat
CC of a first codon fused in frame with a reporter polynucleotide that
CC encodes a reporter protein, which produces, or is predicted to produce a
CC selected phenotype or a phenotype of the same class as the selected
CC phenotype in the organism or part; (5) a method of modulating the quality
CC of a selected phenotype that is displayed by an organism of interest or
CC part and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; (6) a method of enhancing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; and (7) a method of reducing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotype displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
CC invention.
CC
SQ Sequence 18 BP; 0 A; 12 C; 6 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 426 GGCGGCTGCGGCGCGGC 443
DB 18 GGCGGCGGCGGCGCGGC 1
RESULT 488
ADO26612
ID ADO26612 standard; DNA; 18 BP.
XX
AC ADO26612;
XX

```

DT 12-AUG-2004 (first entry)  
 XX Synthetic leader sequence encoding DNA SEQ ID NO:5.  
 DE phenotypic; phenotypic preference; phenotype modulation; leader; ds.  
 KW Synthetic.  
 OS  
 XX WO2004042059-A1.  
 PN  
 XX 21-MAY-2004.  
 PD  
 XX 10-NOV-2003; 2003WO-AU001487.  
 PF  
 XX 08-NOV-2002; 2002US-0425163P.  
 BR  
 XX (UYQU ) UNIV QUEENSLAND.  
 PA  
 XX Frazer IH;  
 PI  
 XX WPI; 2004-411519/38.  
 DR  
 XX P-PSDB; ADO26613.  
 XX  
 PT Constructing synthetic polynucleotide for modulating the quality of a  
 PT selected phenotype displayed by an organism comprises replacing a first  
 PT codon with a synonymous codon to construct the synthetic polynucleotide.  
 XX  
 PS Example 1; SEQ ID NO 5; 86pp; English.  
 XX  
 XX The present invention describes a method for constructing a synthetic  
 CC polynucleotide from which a polypeptide is producible to confer a  
 CC selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. The method comprises: (a) selecting a first codon of  
 CC the parent polynucleotide for replacement with a synonymous codon, where  
 CC the synonymous codon is selected on the basis that it exhibits a  
 CC different phenotypic preference than the first codon in a comparison of  
 CC phenotypic preferences in test organisms or parts, where the test  
 CC organisms are selected from organisms of the same species as the organism  
 CC of interest and organisms that are related to the organisms of interest;  
 CC and (b) replacing the first codon with the synonymous codon to construct  
 CC the synthetic polynucleotide. Also described: (1) a method for  
 CC determining the phenotypic preference of a first codon in an organism of  
 CC interest or its parts; (2) a synthetic polynucleotide constructed from  
 CC the method above; (3) an organism or interest or part containing a  
 CC synthetic polynucleotide constructed from the method above; (4) an  
 CC organism or interest or part containing a synthetic construct that  
 CC comprises a regulatory polynucleotide operably linked to a tandem repeat  
 CC of a first codon fused in frame with a reporter polynucleotide that  
 CC encodes a reporter protein, which produces, or is predicted to produce a  
 CC selected phenotype or a phenotype of the same class as the selected  
 CC phenotype in the organism or part; (5) a method of modulating the quality  
 CC of a selected phenotype that is displayed by an organism of interest or  
 CC part and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; (6) a method of enhancing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; and (7) a method of reducing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide. The method is useful for constructing a  
 CC synthetic polynucleotide from which a polypeptide is producible to confer  
 CC a selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. It is useful for modulating the quality of a selected  
 CC phenotype displayed by an organism or part. The present sequence encodes  
 CC a synthetic leader sequence, which is used in an example from the present  
 CC invention.  
 XX  
 SO Sequence 18 BP; 0 A; 6 C; 12 G; 0 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 4.9e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Qy 427 GCGGCTGCGGCGCGCG 444  
 Db 1 GCGGCGGCGCGCGCGCG 18  
 RESULT 489  
 ADO26628/C  
 ID ADO26628 standard; DNA, 18 BP.  
 XX  
 XX ADO26628;  
 AC  
 XX  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Synthetic leader sequence encoding DNA SEQ ID NO:21.  
 KW phenotypic; phenotypic preference; phenotype modulation; leader; ds.  
 XX  
 OS Synthetic.  
 OS  
 XX WO2004042059-A1.  
 PN  
 XX 21-MAY-2004.  
 PD  
 XX 10-NOV-2003; 2003WO-AU001487.  
 PF  
 XX 08-NOV-2002; 2002US-0425163P.  
 BR  
 XX (UYQU ) UNIV QUEENSLAND.  
 PA  
 XX Frazer IH;  
 PI  
 XX WPI; 2004-411519/38.  
 DR  
 XX P-PSDB; ADO26629.  
 XX  
 PT Constructing synthetic polynucleotide for modulating the quality of a  
 PT selected phenotype displayed by an organism comprises replacing a first  
 PT codon with a synonymous codon to construct the synthetic polynucleotide.  
 XX  
 PS Example 1; SEQ ID NO 21; 86pp; English.  
 XX  
 XX The present invention describes a method for constructing a synthetic  
 CC polynucleotide from which a polypeptide is producible to confer a  
 CC selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. The method comprises: (a) selecting a first codon of  
 CC the parent polynucleotide for replacement with a synonymous codon, where  
 CC the synonymous codon is selected on the basis that it exhibits a  
 CC different phenotypic preference than the first codon in a comparison of  
 CC phenotypic preferences in test organisms or parts, where the test  
 CC organisms are selected from organisms of the same species as the organism  
 CC of interest and organisms that are related to the organisms of interest;  
 CC and (b) replacing the first codon with the synonymous codon to construct  
 CC the synthetic polynucleotide. Also described: (1) a method for  
 CC determining the phenotypic preference of a first codon in an organism of  
 CC interest or its parts; (2) a synthetic polynucleotide constructed from  
 CC the method above; (3) an organism or interest or part containing a  
 CC synthetic polynucleotide constructed from the method above; (4) an  
 CC organism or interest or part containing a synthetic construct that  
 CC comprises a regulatory polynucleotide operably linked to a tandem repeat  
 CC of a first codon fused in frame with a reporter polynucleotide that  
 CC encodes a reporter protein, which produces, or is predicted to produce a  
 CC selected phenotype or a phenotype of the same class as the selected  
 CC phenotype in the organism or part; (5) a method of modulating the quality  
 CC of a selected phenotype that is displayed by an organism of interest or  
 CC part and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; (6) a method of enhancing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; and (7) a method of reducing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that

```

CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotypic displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
CC invention.
XX
SQ Sequence 18 BP; 0 A; 12 C; 6 G; 0 T; 0 U; 0 Other;
XX
Query March 1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0
QY 427 GCGGCTGCGGCGCGCGG 444
Db 18 GCGGCGCGCGGCGCGGCGG 1
RESULT 490
ADO26682
ID ADO26682 standard; DNA; 18 BP.
AC ADO26682;
XX
DT 12-AUG-2004 (first entry)
XX
DE Synthetic leader sequence encoding DNA SEQ ID NO:75.
XX
XX phenotype; phenotypic preference; phenotypic modulation; leader; ds.
XX
OS Synthetic.
XX
PN WO2004042059-A1.
XX
PD 21-MAY-2004.
XX
XX 10-NOV-2003; 2003WO-AU001487.
XX
PR 08-NOV-2002; 2002US-0425163P.
XX
PA (UYQU ) UNIV QUEENSLAND.
XX
PI Frazer IH;
XX
DR WPI: 2004-411519/38.
XX
P-PSDB; ADO26683.
XX
XX
XX Constructing synthetic polynucleotide for modulating the quality of a
XX selected phenotype displayed by an organism comprises replacing a first
XX codon with a synonymous codon to construct the synthetic polynucleotide.
XX
XX Example 1; SEQ ID NO 75; 86pp; English.
XX
XX The present invention describes a method for constructing a synthetic
XX polynucleotide from which a polypeptide is producible to confer a
XX selected phenotype to an organism of interest or part in a different
XX quality than that conferred by a parent polynucleotide that encodes the
XX same polypeptide. The method comprises: (a) selecting a first codon of
XX the parent polynucleotide for replacement with a synonymous codon, where
XX the synonymous codon is selected on the basis that it exhibits a
XX different phenotypic preference than the first codon in a comparison of
XX phenotypic preferences in test organisms or parts, where the test
XX organism are selected from organisms of the same species as the organism
XX of interest and organisms that are related to the organisms of interest;
XX and (b) replacing the first codon with the synonymous codon to construct
XX the synthetic polynucleotide. Also described: (1) a method for
XX determining the phenotypic preference of a first codon in an organism of
XX interest or its parts; (2) a synthetic polynucleotide constructed from
XX the method above; (3) an organism or interest or part containing a
XX synthetic polynucleotide constructed from the method above; (4) an
XX organism or interest or part containing a synthetic construct that
XX

```

CC	comprises a regulatory polynucleotide operably linked to a tandem repeat
CC	of a first codon fused in frame with a reporter polynucleotide that
CC	encodes a reporter protein, which produces, or is predicted to produce a
CC	selected phenotype or a phenotype of the same class as the selected
CC	phenotype in the organism or part; (5) a method of modulating the quality
CC	of a selected phenotype that is displayed by an organism of interest or
CC	part and that results from the expression of a parent polynucleotide that
CC	encodes the polypeptide; (6) a method of enhancing the quality of a
CC	selected phenotype that is displayed by an organism of interest or part
CC	and that results from the expression of a parent polynucleotide that
CC	encodes the polypeptide; and (7) a method of reducing the quality of a
CC	selected phenotype that is displayed by an organism of interest or part
CC	and that results from the expression of a parent polynucleotide that
CC	encodes the polypeptide. The method is useful for constructing a
CC	synthetic polynucleotide from which a polypeptide is producible to confer
CC	a selected phenotype to an organism of interest or part in a different
CC	quality than that conferred by a parent polynucleotide that encodes the
CC	same polypeptide. It is useful for modulating the quality of a selected
CC	phenotype displayed by an organism or part. The present sequence encodes
CC	a synthetic leader sequence, which is used in an example from the present
CC	invention.
CC	
SQ	Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match	1.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity	88.9%; Pred. No. 4.9e+02;
Matches 16; Conservative	0; Mismatches 2; Indels 0; Gaps 0;
Oy	1520 AAAAAAAAAAAGTAA 1537       1 AAAAAAAAAAAAAAAAAA 18
Db	
RESULT 491	
ID ADP44333/C	
ID ADP44333 standard; DNA; 18 BP.	
XX AC ADP44333;	
XX DT 09-SEP-2004 (first entry)	
XX DE Arabidopsis DNA PCR primer #2.	
KM Arabidopsis; PCR primer; 89; Nucleic acid extraction; protease;	
KW subtilisin-like serine protease; proteinase K; mouse tail tissue;	
KX mouse ear tissue.	
XX OS Arabidopsis.	
OS US2004115658-A1.	
PN XX	
PD 17-JUN-2004.	
PF 17-DEC-2002; 2002US-00322103.	
PR 17-DEC-2002; 2002US-00322103.	
PA (WEBE// WEBER S A.	
PA (DOUG// DOUGLAS D K.	
PA (KREA// KREIDER C.	
PI Weber SA, Douglas DK, Kreider C;	
DR WPI, 2004-460399/43.	
PT Extraction of nucleic acids from tissue sample, e.g. mammalian tissue	
PT comprising mouse tail or ear tissue, or plant tissue, comprises	
PT incubating sample in extraction composition buffered to specific pH and	
PT comprising protease enzyme.	
PS Example 4; SEQ ID NO 8; 19pp; English.	
XX The invention relates to a method of extracting nucleic acids from a	



CC tissue sample, comprising incubating the sample in an extraction  
CC composition that is buffered to a pH of 7.5 or greater. The extraction  
CC composition comprises a protease enzyme and does not contain a surface  
CC active agent. The protease enzyme is a subtilisin-like serine protease,  
CC which is proteinase K. The method is useful for extracting nucleic acids  
CC from a tissue sample, e.g. a mammalian tissue comprising mouse tail  
CC tissue or mouse ear tissue, or a plant tissue comprising a leaf or a  
CC seed. The protease enzyme causes partial tissue breakdown such that  
CC nucleic acids are released. This sequence represents a PCR primer used to  
CC amplify Arabidopsis DNA, used in the method of the invention.

XX  
SQ Sequence 18 BP; 4 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1025 GATTGACGCGAGTGGC 1042  
DB 18 GTTGACGACAGTGGC 1

RESULT 492  
ADP86130/C  
ID ADP86130 standard; DNA; 18 BP.  
XX  
AC ADP86130;  
XX  
DT 09-SEP-2004 (first entry)  
XX  
DE Cpg immunostimulatory oligonucleotide #1.  
XX  
KM Cpg immunostimulatory oligonucleotide; immune response; allergy; asthma;  
KM viral infection; bacterial infection; cancer; lymphoma;  
KM intraepithelial neoplasia; melanoma; neuroblastoma; Hodgkin's lymphoma;  
KM carcinoma; sarcoma; gene therapy; phosphorothioate; ss.  
XX  
OS Unidentified.

XX  
FH Key Location/Qualifiers  
FT modified\_base 1..18  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"

XX  
FN WO2004053104-A2.  
XX  
PD 24-JUN-2004.  
XX  
PF 11-DEC-2003; 2003MO-US039775.  
XX  
PR 11-DEC-2002; 2002US-0432409P.  
PR 25-SEP-2003; 2003US-0506108P.  
XX  
PA (COLE-) COLEY PHARM GROUP INC.  
PA (COLE-) COLEY PHARM GMBH.  
XX  
PI Kriegl AM, Jurk M, Vollmer J, Uhlmann E;  
XX  
DR WPI; 2004-487902/46.  
XX  
PT New oligonucleotides, useful for treating allergy or asthma, viral and  
PT bacterial infections, and cancer, e.g. biliary tract cancer, breast  
PT cancer, cervical cancer.  
XX  
PS Example; SEQ ID NO 1, 104pp; English.  
XX  
XX The invention relates to a class of Cpg immunostimulatory  
CC oligonucleotides containing a 5'-TCG motif or a CG at or the 5' end that  
CC are useful for stimulating an immune response. Oligonucleotides and  
CC compositions of the invention are useful for treating allergy or asthma,  
CC viral and bacterial infections and cancer e.g. biliary tract cancer,  
CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,

CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,  
CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,  
CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,  
CC rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain  
CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,  
CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,  
CC testicular cancer, as well as other carcinomas and sarcomas. The  
CC invention is also useful in gene therapy. The present sequence is a Cpg  
CC immunostimulatory oligonucleotide.

XX  
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 4.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 493  
AAQ20029/C  
ID AAQ20029 standard; DNA; 19 BP.  
XX  
AC AAQ20029;  
XX  
DT 01-APR-1992 (first entry)  
XX  
DE Cross-linking oligomer 115 for targeting HUMULB.  
XX  
KM deoxyribonucleic acid; major groove; ethanoino group; IL-1;  
KM aziridinylcytosine; cross-linking group; o-xyloso linking group;  
KM human interleukin-1 beta; inverted polarity region; ss.  
XX  
OS Synthetic.

XX  
FH Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N4N4-ethanocytosine"  
FT 4  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT 14..19  
FT misc\_feature  
FT /\*tag= c  
FT /label= inverted polarity\_region  
FT /note= "see comments"  
FT 14  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT 18  
FT modified\_base  
FT /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT 19  
FT /\*tag= f  
FT /mod\_base= OTHER  
FT /note= "N4N4-ethanocytosine"

XX  
FN WO9118997-A.  
XX  
PD 12-DEC-1991.  
XX  
PT 25-MAY-1990; 90US-00529346.  
XX  
PR 25-MAY-1990; 90US-00529346.  
PR 14-JAN-1991; 91US-00640654.  
XX  
PA (GILE-) GILEAD SCIE INC.

```

XX  Matteucci MD, Krawczyk S;
XX  WPI; 1992-007480/01.
XX
XX  New sequence-specific non-photo-activated crosslinking agents - bind to
XX  the major groove of duplex DNA and are esp. useful for treating latent
XX  infections e.g. HIV.
XX
XX  Example 4; Page 25; 42pp; English.
XX
XX  This oligomer contains an inverted polarity region formed from an o-
XX  xylosio dimer synthon. Residues 13 and 14 are linked via an o-xylosio group
XX  (i.e. nucleotides that have xylose sugar linked via the o-xylyene ring).
XX  The sequence is designed to target the Human Interleukin-1 beta gene
XX  beginning at nucleotide 7378 and will covalently cross-link to it via the
XX  N4H4-ethanocytosine groups. See also AAQ20026-Q20030
XX
XX  Sequence 19 BP; 3 A; 2 C; 0 G; 14 T; 0 U; 0 Other;
XX
XX  Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX  Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX  Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Oy  1515 TTAATTAAAAAAAAG 1532
    ||| ||| ||| ||| |||
    18 TAAATAAAAAAAATAG 1
XX
XX  RESULT 494
XX  AAQ30373/C
XX  ID AAQ30373 standard; DNA; 19 BP.
XX
XX  AAQ30373;
XX
XX  25-MAR-2003 (revised)
XX  07-DEC-1992 (first entry)
XX
XX  Oligomer HUM beta 113 for forming triplex with IL-1 target duplex.
XX
XX  Human interleukin - 1 beta gene; herpes simplex; AIDS; modified; HIV;
XX  RSV; HPV; malignancy; hepatitis; inflammation; ss.
XX
XX  Synthetic.
XX
XX  Key
XX  modified_base
XX  1 Location/Qualifiers
XX  /tag= a
XX  /mod_base= OTHER
XX  /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX
XX  modified_base
XX  4
XX  /tag= b
XX  /mod_base= OTHER
XX  /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX
XX  misc_feature
XX  13..14
XX  /tag= g
XX  /note= "O-xylosio dimer synthon linkage"
XX
XX  misc_feature
XX  14..19
XX  /tag= f
XX  /label= inverted_polarity_region
XX  /note= "see comments"
XX
XX  modified_base
XX  14
XX  /tag= c
XX  /mod_base= OTHER
XX  /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX
XX  modified_base
XX  18
XX  /tag= d
XX  /mod_base= OTHER
XX  /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX
XX  modified_base
XX  19
XX  /tag= e
XX  /mod_base= OTHER
XX  /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX

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XX  WO9209705-A1.
XX
XX  11-JUN-1992.
XX
XX  25-NOV-1991; 91WO-US008811.
XX
XX  23-NOV-1990; 90US-00617907.
XX  18-JAN-1991; 91US-00643382.
XX  08-APR-1991; 91US-00683420.
XX  17-APR-1991; 91US-00686544.
XX  17-APR-1991; 91US-00686546.
XX  17-APR-1991; 91US-00686547.
XX  27-SEP-1991; 91US-00766733.
XX
XX  (GILE-) GILEAD SCI INC.
XX
XX  Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX  WPI; 1992-217083/26.
XX
XX  New oligomers contg. modified bases - which form a triplex with G-C
XX  doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX  herpes malignancy and inflammation.
XX
XX  Claim 12; Page 70; 77pp; English.
XX
XX  The synthetic oligomer is capable of forming a triplex at physiological
XX  pH with a purine rich target sequence by coupling into the major groove
XX  of the duplex. The specific target sequence of this oligomer is the human
XX  interleukin-1 beta gene beginning at nucleotide 7378 contg. a purine
XX  rich sequence concd. on one strand of the duplex. The oligomer, and
XX  others like it are useful in diagnosis and therapy of diseases
XX  characterised by specific DNA duplex targets, e.g. HPV; HER; HIV,
XX  hepatitis B, herpes, malignant tumours and inflammation. The triple
XX  helices form under mild conditions thus assays may be carried out without
XX  subjecting the test specimen to harsh conditions. The oligomer contains
XX  an inverted polarity region formed from an o-xylosio dimer synthon. The
XX  linking gp. is o-xylosio (nucleotides have the 3' positions of xylose
XX  sugars linked via the o-xylyene ring). Two nucleotides are coupled through
XX  a xylyene residue to form the dimer synthon. This additional modifications
XX  may render the oligomer stable to nuclease activity. The oligomer is able
XX  to inhibit gene expression, as verified by in vitro systems. See also
XX  AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN
XX  field.)
XX
XX  Sequence 19 BP; 5 A; 0 C; 0 G; 14 T; 0 U; 0 Other;
XX
XX  Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX  Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX  Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Oy  1514 TTAATTAAAAAAAAG 1531
    ||| ||| ||| ||| |||
    19 TTAATTTAAAAAAAATAA 2
XX
XX  RESULT 495
XX  AAQ30375/C
XX  ID AAQ30375 standard; DNA; 19 BP.
XX
XX  AAQ30375;
XX
XX  25-MAR-2003 (revised)
XX  07-DEC-1992 (first entry)
XX
XX  Oligomer HUM beta 115 for forming triplex with IL-1 target duplex.
XX
XX  Human interleukin - 1 beta gene; herpes simplex; AIDS; modified; HIV;
XX  RSV; HPV; malignancy; hepatitis; inflammation; ss.
XX
XX  Synthetic.
XX

```

	Key	Location/Qualifiers
PH	modified_base	1 /tag= a
FT		/mod_base= OTHER
FT		/note= "OTHER= N4 N4 ethanocytosine"
FT	modified_base	4 /tag= b
FT		/mod_base= m5c
FT		13. .14
FT		/tag= g
FT		/note= "o-xylosa dimer synthon linkage"
FT		14. .20
FT		/tag= f
FT		/label= inverted_polarity_region
FT		/note= "see comments"
FT	modified_base	14 /tag= c
FT		/mod_base= m5c
FT		18
FT		/tag= d
FT		/mod_base= m5c
FT		19
FT	modified_base	/tag= e
FT		/mod_base= OTHER
FT		/note= "OTHER= N4 N4 ethanocytosine"
XX		
PN	W09209705-A1.	
XX		
PD	11-JUN-1992.	
XX		
PF	25-NOV-1991;	91WO-US000811.
XX		
PR	23-NOV-1990;	90US-00617907.
PR	18-JAN-1991;	91US-00643382.
PR	08-APR-1991;	91US-00683420.
PR	17-APR-1991;	91US-00686544.
PR	17-APR-1991;	91US-00686546.
PR	17-APR-1991;	91US-00766733.
PR	27-SEP-1991;	91US-00766733.
XX		
PA	(GILE-) GILEAD SCI INC.	
PI	Froehler B, Krawczyk S, Matteucci MD, Milligan J;	
XX		
DR	WPI, 1992-217083/26.	
XX		
PT	New oligomers contg. modified bases - which form a triplex with G-C	
PT	doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,	
PT	herpes malignancy and inflammation.	
XX		
PS	Claim 12; Page 70; 77pp; English.	
XX		
CC	The synthetic oligomer is capable of forming a triplex at physiological	
CC	pH with a purine rich target sequence by coupling into the major groove	
CC	of the duplex. The specific target sequence of this oligomer is the human	
CC	interleukin-1 beta gene beginning at nucleotide 7378 contg. a purine	
CC	rich sequence contd. on one strand of the duplex. The oligomer, and	
CC	others like it are useful in diagnosis and therapy of diseases	
CC	characterised by specific DNA duplex targets, e.g. HPV; HBV; HIV,	
CC	hepatitis B, herpes, malignant tumours and inflammation. The triplex	
CC	helices form under mild conditions thus assays may be carried out without	
CC	subjecting the test specimen to harsh conditions. The oligomer contains	
CC	an inverted polarity region formed from an o-xylosa dimer synthon. The	
CC	linking gp. is o-xylosa (nucleotides have the 3 positions of xylose	
CC	sugars linked via the o-xylosa ring). Two nucleotides are coupled through	
CC	a xylosa residue to form the dimer synthon. This additional modifications	
CC	may render the oligomer stable to nuclease activity. The oligomer is able	
CC	to inhibit gene expression, as verified by in vitro systems. See also	
CC	AA025452-25501 and AA030226-448. (Updated on 25-MAR-2003 to correct PN	
CC	field.)	
XX		
Q0	Sequence 19 BP; 3 A; 2 C; 0 G; 14 T; 0 U; 0 Other;	

```

Query Match          1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0

QY      1515 TAAATTAATTAATTAATTAATTAAG 1532
      ||| ||| ||| ||| ||| ||| ||| |||
DB      18 TAAATTAATTAATTAATTAATTAAG 1

RESULT 496
AA075553/C
ID AA075553 standard; DNA; 19 BP.
XX
AC AA075553;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
OS Synthetic.
XX
PN JP0630397-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI, 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENBSEQ files AA075547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
CC
SQ Sequence 19 BP; 1 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match          1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0

QY      1519 TAAAAAAAAAAAAAGTAA 1536
      ||| ||| ||| ||| ||| ||| ||| |||
DB      18 TAAAAAAAAAAAAAGTAA 1

RESULT 497
AA075551/C
ID AA075551 standard; DNA; 19 BP.
XX
AC AA075551;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.

```

```

XX OS Synthetic.
XX PN JP0630397-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESQ files AAQ75547-075798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 19 BP; 1 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAAAAAGTAAA 1536
Db 18 TAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 498
XX AAQ75554/C
XX ID AAQ75554 standard; DNA; 19 BP.
XX AC AAQ75554;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP0630397-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of

```

```

CC CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC CC labelled reverse transcription primers (GENESQ files AAQ75547-075798)
CC CC and using the aggregate of mRNAs as the template for each reverse
CC CC transcription primer; (b) digesting each of the prepared aggregates of
CC CC the double-stranded cDNAs with restriction enzyme and; (c)
CC CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 19 BP; 1 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAAAAAGTAAA 1536
Db 18 TAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 499
XX AAT10757/C
XX ID AAT10757 standard; RNA; 19 BP.
XX AC AAT10757;
XX DT 09-SEP-1996 (first entry)
XX DE Oligonucleotide probe, T-2.
XX KW Electronically self-addressable device; ED; electrode; current source;
XX KW attachment layer; permeable; counterion; genetic typing; probe;
XX KW detection; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1 /*tag= a
XX FT /note= "5'-amino terminus"
XX PN W09601836-A1.
XX PD 25-JAN-1996.
XX PF 05-JUL-1995; 95WO-US008570.
XX PR 07-JUL-1994; 94US-00271882.
XX PA (NANO-) NANOGEN INC.
XX PI Heller MJ, Tu E, Evans GA, Sosnowski RG;
XX DR WPI; 1996-097582/10.
XX PT Electronically self-addressable device - used for electronic control of,
XX PS e.g. nucleic acid hybridisation.
XX PS Example 1; Page 61; 155pp; English.
XX CC The sequences given in AAT10742-67 are synthetic oligonucleotides which
XX CC are used in the construction of the electronically self-addressable
XX CC device (ED) of the invention. The ED comprises a substrate, an electrode
XX CC or opt. a number of electrodes supported by the substrate, a current
XX CC source operatively connected to the electrode and an attachment layer
XX CC adjacent to the electrode which is permeable to a counterion but not
XX CC permeable to a molecule capable of insulating or binding to the
XX CC electrode. The attachment layer is capable of attaching a macromolecule.
XX CC The ED is used for genetic typing and comprises a number of
XX CC electronically addressable locations each comprising an electrode, and a
XX CC binding entity, such as one of these probes, attached to each of the
XX CC locations capable of detecting the presence of a genetic sequence
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

```

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537  
 DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 500  
 ID AAV07878/C  
 ID AAV07878 standard; DNA; 19 BP.

AC AAV07878;  
 XX 14-DEC-1998 (first entry)  
 XX Aminoxy-modified oligonucleotide.  
 DE Aminoxy-modified oligonucleotide.  
 XX phosphorochlorate; ras gene; malignant cell growth; aminoxy-modified;  
 KM nuclease resistance; reporter group; ss.  
 XX Synthetic.

XX Key Location/Qualifiers  
 FT modified\_base 15.18  
 FT /\*tag= a /note= "5-methyl, 2'-aminoxyethoxy-thymidine"

XX MO9835978-A1.  
 XX 20-AUG-1998.

XX 13-FEB-1998; 98WO-US002405.  
 XX 14-FEB-1997; 97US-0037143P.  
 XX 30-JAN-1998; 98US-00016520.

XX (ISIS-) ISIS PHARM INC.

XX Cook PD, Manoharan M, Kawasaki AM;

XX WPI; 1998-568232/48.

XX New aminoxy-modified oligonucleotides - which can show improved binding  
 PT to complementary strands and improved resistance to nuclease.

XX Disclosure; Page 84; 131pp; English.

XX The invention relates to aminoxy-modified(oligo)nucleotides or  
 CC nucleosides which are useful as therapeutics, diagnostics, and research  
 CC reagents. They may be used, e.g., for modulation of the ras gene and may  
 CC be able to modulate the process of transformation from normal to  
 CC malignant cell growth. They may be prepared using known methods.  
 CC Inclusion of the aminoxy moieties can improve binding of  
 CC oligonucleotides to complementary strands. The moieties can also provide  
 CC conjugation sites useful for conjugation of useful ligands (e.g. reporter  
 CC groups and groups for modifying uptake, distribution or other  
 CC pharmacodynamic properties) to oligonucleotides. The present sequence  
 CC represents an example of an aminoxy-modified oligonucleotide disclosed  
 CC in the specification

XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537  
 DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 501  
 ID AAV06820/C  
 ID AAV06820 standard; DNA; 19 BP.

QY 1520 AAAAAAAAAAGTAAAA 1537  
 DB 19 AAAAAAAAAAAAAAAAAA 2

AC AAV06820;  
 XX 13-OCT-1998 (first entry)  
 XX Oligonucleotide containing modified internucleotide linkage.  
 DE Oligonucleotide containing modified internucleotide linkage.  
 XX oligonucleotide; ss.  
 XX Synthetic.

XX Key Location/Qualifiers  
 FT modified\_base 16.18  
 FT /\*tag= a /note= "these T residues are formed as part of a  
 FT conventional phosphoramidite oligonucleotide synthesis  
 FT process but using as the reactant a thymosine nucleoside  
 FT having at the 3'-position a group of formula -CH2-  
 FT P(OCH2CH2CN)-N(1Pr)2"

XX WO9747636-A2.  
 XX 18-DEC-1997.

XX 03-JUN-1997; 97WO-GB001490.  
 XX 13-JUN-1996; 96GB-00012600.

XX (NOVS ) NOVARTIS AG.

XX Collingwood SP, Moser HE, Altmann K, Douglas ME;

XX WPI; 1998-052233/05.

XX New tetra:hydro:furan derivatives - useful in the synthesis of  
 PT oligo:nucleotide(s).

XX Example 12; Page 29; 37pp; English.

XX The invention relates, inter alia, to a method of preparing an  
 CC oligonucleotide by coupling (1) a new nucleoside having a protected 5'-  
 CC hydroxy group and at the 3'-position a group of formula -CH2-P(OR3)-  
 CC NR4R5, with (2) a nucleoside or oligonucleotide having a free 5'-hydroxy  
 CC group, to give (3) a precursor having an internucleoside linkage of  
 CC formula -CH2-P(OR3)-O-; and converting this to a linkage of formula -CH2-  
 CC P(OR3)(=X)-O- (where X = S or O). The present sequence is a specific  
 CC example of an oligonucleotide so prepared

XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537  
 DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 502  
 ID AAX81316/C  
 ID AAX81316 standard; DNA; 19 BP.

QY 1520 AAAAAAAAAAGTAAAA 1537  
 DB 19 AAAAAAAAAAAAAAAAAA 2

XX 20-AUG-1999 (first entry)  
 XX 5' amino oligonucleotide probe T-2.

```
KW Microelectronic device; multi-step reaction; microscopic format;
KW ion-permeable permeation layer; electrode; electrical control; transport;
KW attachment; binding; DNA/RNA hybrid; probe; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1
FT /tag= a
FT /note= "amino group attached at 5' terminal"
XX
XX MO9929711-1.
XX
XX 17-JUN-1999.
XX
XX 01-DEC-1998; 98WO-US025475.
XX
XX 05-DEC-1997; 97US-00986065.
XX
XX (NANO-) NANOGEN INC.
XX
XX Soenowski RG, Butler WF, Tu E, Nerenberg MI, Heller MJ, Edman CF;
XX
XX WPI; 1999-385567/32.
XX
XX New microelectronic device designed to carry out and control multi-step
XX and multiplex molecular biological reactions in microscopic format.
XX
XX Example 1; Page 90; 17pp; English.
XX
XX The specification describes a self-addressable, self-assembling
XX microelectronic device which is designed to actively carry out and
XX control multi-step and multiplex molecular biological reactions in
XX microscopic formats. A key aspect of this invention is played by the ion
XX permeable permeation layer which overlies the electrode. This permeation
XX layer allows attachment of nucleic acids to permit immobilization but
XX also separates the attached oligonucleotides and hybridized target DNA
XX sequences from the highly reactive electrochemical environment generated
XX immediately at the electrode surface. The microelectronic device is
XX designed and fabricated to actively carry out and control reactions such
XX as nucleic acid hybridizations, antibody/antigen reactions, sample
XX preparation, diagnostics and biopolymer synthesis. The device can
XX electronically control the transport and attachment of specific binding
XX entities, such as nucleic acids and polypeptides, to specific micro-
XX locations. The device can subsequently control the transport and reaction
XX of analytes or reactants at the addressed specific micro-locations. The
XX device is able to concentrate analytes and reactants, remove non-
XX specifically bound molecules, provide stringency control for DNA
XX hybridization reactions and improve the detection of analytes. The
XX present sequence represents a probe used to exemplify the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAGTAAA 1537
XX |||||
XX DB 19 AAAAAAAAAAAAAAAAAA 2
XX
XX RESULT 503
XX AAX02601/c
XX ID AAX02601 standard; DNA; 19 BP.
XX
XX AAX02601;
XX
XX 07-MAY-1999 (first entry)
XX
XX PCR primer #32.
XX
XX Plant artificial chromosome; PLAC; foreign gene expression; trait; oil;
```

```
KW herbicide; resistance; tolerance; insect; disease; stress; drought; heat;
KW chilling; freezing; salt; moisture; oxidative; yield; food content;
KW physical appearance; male sterility; drydown; stability; prolificacy;
KW starch; detection; PCR primer; ss.
XX
OS Synthetic.
XX
OS Arabidopsis thaliana.
XX
XX MO9855637-1.
XX
XX 10-DEC-1998.
XX
XX 03-JUN-1998; 98WO-US011288.
XX
XX 03-JUN-1997; 97US-0048451P.
XX
XX 05-FEB-1998; 98US-0073741P.
XX
XX (ARCH-) ARCH DEV CORP.
XX
XX Copenhagen G, Preuss D;
XX
XX WPI; 1999-080832/07.
XX
XX New isolated Arabidopsis thaliana centromeres - used for the production
XX of plant artificial chromosomes for the production of transgenic plants
XX having desirable agronomic traits.
XX
XX Disclosure; Page 83; 150pp; English.
XX
XX This invention describes a recombinant DNA construct which comprises a
XX functional Arabidopsis thaliana centromere. This centromeric region can
XX be used for the production of plant artificial chromosomes (PLAC's) which
XX PLACs can be used for the production of plants which can express foreign genes.
XX resistance or tolerance, insect resistance or tolerance, disease
XX resistance or tolerance (viral, bacterial, fungal, nematode), stress
XX tolerance and/or resistance, as exemplified by resistance or tolerance to
XX drought, heat, chilling, freezing, excessive moisture, salt stress,
XX oxidative stress, increased yields, food content and makeup, physical
XX appearance, male sterility, drydown, stability, prolificacy, starch
XX quantity and quality, oil quantity and quality, protein quality and
XX quantity, or amino acid composition. The centromeric regions can also be
XX used to detect the presence of similar centromeric regions in other
XX plants or animals. This sequence is a PCR primer used in the method of
XX the invention
XX
XX Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1535 AAGGGAAGCGAGATGT 1552
XX |||||
XX DB 18 AATGGAAAGCGCGATGT 1
XX
XX RESULT 504
XX AAX81927/c
XX ID AAX81927 standard; DNA; 19 BP.
XX
XX AAX81927;
XX
XX 07-SEP-1999 (first entry)
XX
XX Polynucleotide strand with amino groups.
XX
XX Enzyme-specific cleavable polynucleotide substrate;
XX quenched fluorescent moiety; biological assay; detection; identification;
XX microorganism; sterilization assurance; nuclease; ss.
XX
XX Synthetic.
XX
```

```

FH Key Location/Qualifiers
PT modified_base 7
PT /tag= a
PT /note= "amine-modified C6 derivative of deoxythymidine
PT (dT)"
PT modified_base 9
PT /tag= b
PT /note= "amine-modified C6 derivative of deoxythymidine
PT (dT)"
PT modified_base 11
PT /tag= c
PT /note= "amine-modified C6 derivative of deoxythymidine
PT (dT)"
PT modified_base 13
PT /tag= d
PT /note= "amine-modified C6 derivative of deoxythymidine
PT (dT)"
XX WO935288-A1.
XX
XX 15-JUL-1999.
XX
XX 20-AUG-1999; 98WO-US017311.
XX
XX 09-JAN-1998; 98US-00005260.
XX
XX (MINN ) MINNESOTA MINING & MFG CO.
XX
XX Wei A, Mach PA;
XX
XX WPI; 1999-419356/35.
XX
XX An enzyme-specific cleavable polynucleotide substrate bearing quenched
XX fluorescent moieties.
XX
XX Example 2; Page 20; 34pp; English.
XX
XX The specification describes an enzyme-specific cleavable polynucleotide
XX substrate bearing quenched fluorescent moieties. The enzyme-specific
XX cleavable polynucleotide substrate is useful in biological assays for
XX detection and identification of microorganisms, sterilization assurance,
XX pharmaceutical discovery, enzyme assays, immunoassays and other
XX biological assays. The method provides a rapid and convenient approach
XX for detection and identification of microorganisms. It can be adapted to
XX sequence-dependent or sequence-independent tests. The invention provides
XX improved accuracy, faster detection, and overall lower cost in detection
XX and identification of microorganisms. The presence of nuclease is
XX measured more accurately and sensitively by red-shifting the emission of
XX wavelength from far UV region (350-400 nm) to the 500-600 nm region of
XX the electromagnetic spectrum and reducing the effect of background signal
XX levels of intact reagents. The present sequence is used in the course of
XX the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAAAA 1537
OY |||||
DB 19 AAAAAAAAAAAAAAAAAA 2

```

```

XX PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
XX cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
XX PSA; human; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO932644-A2.
XX
XX 01-JUL-1999.
XX
XX 22-DEC-1998; 98WO-1B002133.
XX
XX 22-DEC-1997; 97US-00996306.
XX
XX 09-SEP-1998; 98US-0099658P.
XX
XX (GEST ) GENSET.
XX
XX Cohen D, Blumenfeld M, Chumakov I, Bougueleret L;
XX
XX WPI; 1999-405178/34.
XX
XX Use of a prostate cancer associated gene and biallelic markers derived
XX from it.
XX
XX Claim 4; Page 376; 385pp; English.
XX
XX The invention relates to a mammalian PGI gene and protein, and a set of
XX PGI biallelic markers. The PGI polynucleotide and biallelic markers are
XX used in a hybridization assay, a sequencing assay, or in an allele-
XX specific amplification assay for determining the identity of a nucleotide
XX at a PGI-related biallelic marker. The methods can be used to detect and
XX to assess the risk of developing cancer or prostate cancer. Early-stage
XX diagnosis of prostate cancer relies on prostate specific antigen (PSA)
XX dosage. However, the effectiveness of this is limited due to its
XX inability to discriminate between malignant and non-malignant affections
XX of the organ. A need exists for both a reliable diagnostic procedure
XX which would enable early-stage diagnosis, and for preventative and
XX curative treatments of the disease. The PGI gene can be used for
XX detection of prostate cancer, and the risk of developing it in the
XX future, and can also be used to determine therapies for the disease
XX
XX Sequence 19 BP; 8 A; 1 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1132 ATGAGTGTAAATTCT 1149
OY |||||
DB 2 ATGAGTGTAAATTCT 19

```

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RESULT 505
AAZ01369
ID AAZ01369 standard; DNA; 19 BP.
XX
XX AAZ01369;
XX
XX 27-SEP-1999 (first entry)
XX
XX PCR primer for PGI biallelic marker 4-52-163.
DE

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RESULT 506
AAZ01358/C
ID AAZ01358 standard; DNA; 19 BP.
XX
XX AAZ01358;
XX
XX 27-SEP-1999 (first entry)
XX
XX PCR primer for PGI biallelic marker 4-4-187.
XX
XX PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
XX cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
XX PSA; human; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO932644-A2.
XX

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```
PD 01-JUL-1999.
XX
XX 22-DEC-1998; 98WO-IB002133.
XX
XX 22-DEC-1997; 97US-00996306.
PR 09-SEP-1998; 98US-0099658P.
XX
XX (GENSET ) GENSET.
PA
XX Cohen D, Blumenfeld M, Chumakov I, Bougueleret L;
XX WPI: 1999-405178/34.
XX
XX WPI: 1999-405178/34.
XX
XX Use of a prostate cancer associated gene and biallelic markers derived
PT from it.
XX
XX Claim 4; Page 374; 385pp; English.
PS
XX The invention relates to a mammalian PGI gene and protein, and a set of
CC PGI biallelic markers. The PGI polynucleotide and biallelic markers are
CC used in a hybridisation assay, a sequencing assay, or in an allele-
CC specific amplification assay for determining the identity of a nucleotide
CC at a PGI-related biallelic marker. The methods can be used to detect and
CC to assess the risk of developing cancer or prostate cancer. Early-stage
CC diagnosis of prostate cancer relies on prostate specific antigen (PSA)
CC dosage. However, the effectiveness of this is limited due to its
CC inability to discriminate between malignant and non-malignant affections
CC of the organ. A need exists for both a reliable diagnostic procedure
CC which would enable early-stage diagnosis, and for preventative and
CC curative treatments of the disease. The PGI gene can be used for
CC detection of prostate cancer, and the risk of developing it in the
CC future, and can also be used to determine therapies for the disease
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 19 AAAAAAAAAAAAAAAAAA 2
RESULT 507
AAZ61390/C
ID AAZ61390 standard; DNA; 19 BP.
XX
XX AAZ61390;
AC
XX 19-JUN-2000 (first entry)
DT
XX
XX Uniform phosphodiester oligonucleotide.
DE
XX Oligomeric compound; 2'-O-modified ribosyl nucleoside; 3' endo geometry;
KW nuclease resistance; phosphodiester; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 16 /*tag= a
FT /*note= "2'-modified T"
FT modified_base 17 /*tag= b
FT /*note= "2'-modified T"
FT modified_base 18 /*tag= c
FT /*note= "2'-modified T"
FT modified_base 19 /*tag= d
FT /*note= "2'-modified T"
XX
```

```
PN WO200008044-A1.
XX
XX 17-FEB-2000.
PD
XX
XX 06-AUG-1999; 99WO-US017895.
XX
XX 07-AUG-1998; 98US-00130566.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Manoharan M, Cook PD;
XX WPI: 2000-205668/18.
XX
XX Novel 2'-O-aminoethyloxyethyl modified nucleosides and oligonucleotides
PT used in diagnostic, therapeutic and research reagents.
XX
XX Disclosure; Page 44; 60pp; English.
PS
XX The present sequence represents an uniform phosphodiester
CC oligonucleotide. The specification describes oligomeric compounds
CC containing 2'-O-modified ribosyl nucleosides. The 2'-O-modified
CC nucleosides include ring structures that position the sugar moiety of the
CC nucleosides preferentially in 3' endo geometries. The modified oligomeric
CC compounds have increased binding affinity and increased nuclease
CC resistance. The oligomeric compounds can be used in diagnostic,
CC therapeutic and research reagents
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 19 AAAAAAAAAAAAAAAAAA 2
RESULT 508
AAZ61404/C
ID AAZ61404 standard; DNA; 19 BP.
XX
XX AAZ61404;
AC
XX 19-JUN-2000 (first entry)
DT
XX
XX 2'-O-modified ribosyl oligonucleotide with phosphodiester linkages.
DE
XX Oligomeric compound; 2'-O-modified ribosyl nucleoside; 3' endo geometry;
KW nuclease resistance; phosphorothioate; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH misc_feature 1..19 /*tag= a
FT /*note= "nucleosides linked by phosphodiester linkages"
FT modified_base 16..19 /*tag= b
FT /*note= "2'-O-[2-N,N-dimethylaminoethyl]oxyethyl-5- methyl
FH uridine"
XX
XX WO200008044-A1.
XX
XX 17-FEB-2000.
PD
XX
XX 06-AUG-1999; 99WO-US017895.
XX
XX 07-AUG-1998; 98US-00130566.
XX
XX (ISIS-) ISIS PHARM INC.
XX
```



PI Manoharan M, Cook PD;  
XX  
DR WPI; 2000-205668/18.  
XX  
PT Novel 2'-O-aminoethylxyethyl modified nucleosides and oligonucleotides  
PT used in diagnostic, therapeutic and research reagents.  
XX  
PS Disclosure; Page 51; 60pp; English.  
XX  
CC The present sequence represents an oligomeric compound containing 2'-O-  
CC modified ribosyl nucleosides. The oligomeric compound contains  
CC phosphodiester linkages. The 2'-O-modified nucleosides include ring  
CC structures that position the sugar moiety of the nucleosides  
CC preferentially in 3' endo geometries. The modified oligomeric compounds  
CC have increased binding affinity and increased nuclease resistance. The  
CC oligomeric compounds can be used in diagnostic, therapeutic and research  
CC reagents  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Beet Local Similarity 88.9%; Fred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0.  
OY 1520 AAAAAAAAAAGTAAA 1537  
DB 19 AAAAAAAAAAAAAAAAAA 2  
XX  
RESULT 509  
AAC62422/c  
ID AAC62422 standard; DNA; 19 BP.  
XX  
AC AAC62422;  
XX  
DT 07-FEB-2001 (first entry)  
XX  
XX T19 diester for use in nuclease stability assay.  
XX  
KM T19 diester; nuclease stability assay; polymerase chain reaction; PCR;  
KM molecular cloning; disease diagnosis; disease treatment; ss.  
XX  
OS Synthetic.  
XX  
PN US6127124-A.  
XX  
PD 03-OCT-2000.  
XX  
XX 20-JAN-1999; 99US-00234237.  
PF 20-JAN-1999; 99US-00234237.  
PR 20-JAN-1999; 99US-00234237.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
PI Leeds JM, Cummins LJ;  
XX  
DR WPI; 2000-637737/61.  
XX  
PT Determining the nuclease stability and relative binding affinity of an  
PT oligomeric compound comprises capillary gel electrophoresis using laser-  
PT induced fluorescence.  
XX  
PS Example 3; Col 19-20; 14pp; English.  
XX  
CC The present invention is concerned with methods of determining the  
CC nuclease stability of oligomeric compounds using capillary-gel  
CC electrophoresis and laser-induced fluorescence. The methods are useful in  
CC the polymerase chain reaction (PCR), molecular cloning and disease  
CC diagnosis and treatment. The present sequence was used in a demonstration  
CC of the methods of the invention  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

	Query Match	1.1%; Score 14.8; DB 1; Length 19;
	Best Local Similarity	88.9%; Pred. No. 4.6e+02;
	Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
Oy	1520 AAAAAAAAAAAAGTAAA	1537
Dd	19 AAAAAAAAAAAAAAAAAA	2
	RESULT 510	
ID	AAA86030/C	
XX	AAA86030 standard; DNA; 19 BP.	
AC	AAA86030;	
DT	04-DEC-2000 (first entry)	
DE	Cdc 25 hs ribozyme binding site #138.	
KM	Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.	
OS	Mammalia.	
PN	WO200032765-A2.	
PD	08-JUN-2000.	
PF	06-DEC-1999; 99WO-US028772.	
PR	04-DEC-1998; 98US-O110954P.	
PA	(IMMU-) IMMUSOL INC.	
PJ	Tritz R, Welch PJ, Barber JR, Robbins JW;	
PI	WPI: 2000-412314/35.	
DR	New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.	
PS	Disclosure; Page 101; 10pp; English.	
CC	The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AA882915 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment	
SQ	Sequence 19 BP; 10 A; 2 C; 3 G; 4 T; 0 U; 0 Other;	
Oy	Query Match	1.1%; Score 14.8; DB 1; Length 19;
	Best Local Similarity	88.9%; Pred. No. 4.6e+02;
	Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
Dd	1305 ATTTTATTATTCAGA	1322
	18 ATTTCTTAATTGCAGA	1
	RESULT 511	
ID	AAZ72936/C	
XX	AAZ72936 standard; DNA; 19 BP.	
AC	AAZ72936;	
DT	10-SEP-2001 (first entry)	
DE	Human biallelic marker upstream amplification primer SEQ ID NO:7292.	

KM Human genome, biallelic marker, high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
diagnosis; ss.  
OS Homo sapiens.  
XX MO9954500-A2.  
XX  
XX 28-OCT-1999.  
PD  
XX 21-APR-1999; 99MO-IB000822.  
PF  
XX 21-APR-1998; 98US-0082614P.  
PR  
XX 23-NOV-1998; 98US-0109732P.  
PR  
XX (GEST ) GENSET.  
PA  
XX Cohen D, Blumenfeld M, Chumakov I;  
PI  
XX WPI; 2000-013267/01.  
DR  
XX  
XX Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
XX  
XX Claim 9; Page 1785; 2745P; English.  
PS  
XX  
XX AAZ6564 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ6579 to AAZ7740 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
CC  
XX  
SQ Sequence 19 BP; 10 A; 0 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1103 TCTAATTCATTTTCC 1120  
DB 18 TCTCATTTCCATTTTCC 1  
RESULT 512  
AAAF2205/C  
ID AAFA22205 standard; DNA; 19 BP.  
XX  
XX AAFA22205;  
AC  
XX 20-MAR-2001 (first entry)  
DT  
XX Arabidopsis thaliana chromosome centromere associated primer #89.  
DE  
XX Centromere; mitochondosome; vector; ds.  
KM  
XX Arabidopsis thaliana.  
OS  
XX MO200055325-A2.  
PN  
XX 21-SEP-2000.  
PD  
XX

PR 17-MAR-2000; 2000MO-US007392.  
XX  
XX 18-MAR-1999; 99US-0125219P.  
PR  
XX 01-APR-1999; 99US-0127409P.  
PR  
XX 18-MAY-1999; 99US-0134770P.  
PR  
XX 13-SEP-1999; 99US-0153584P.  
PR  
XX 17-SEP-1999; 99US-0154603P.  
PR  
XX 16-DEC-1999; 99US-0172493P.  
XX  
XX (UYCH-) UNIV CHICAGO.  
PA  
XX  
XX Preuss D, Copenhagen G, Keith K;  
PI  
XX WPI; 2000-587529/55.  
DR  
XX  
XX Recombinant DNA construct comprising a plant centromere, useful for  
PT producing stably inherited mitochondosomes which can serve as vectors for the  
PT construction of transgenic plant and animal cells.  
XX  
XX  
XX Disclosure; Page 296; 1449P; English.  
PS  
XX  
XX The present invention relates to a recombinant DNA construct of a plant  
CC (Arabidopsis thaliana) centromere. The constructs are useful for  
CC producing stably inherited mitochondosomes which can serve as vectors for the  
CC construction of transgenic plant and animal cells expressing selected  
CC proteins such as hormones, enzymes, interleukins, clotting factors,  
CC cytokines, antibodies, and growth factors  
CC  
XX  
SQ Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1535 AAAGCAAGCGAGATGT 1552  
DB 18 AATGGAAGCGCGATGT 1  
RESULT 513  
AAZ95241/C  
ID AAZ95241 standard; DNA; 19 BP.  
XX  
XX AAZ95241;  
AC  
XX  
XX 05-JUN-2000 (first entry)  
DT  
XX  
XX Modified oligonucleotide #3 ISIS # 22111.  
DE  
XX Antisense oligonucleotide; phosphorothioate; gene therapy; ISIS # 22111;  
KM research reagent; therapeutic; ss.  
KW  
XX  
XX Synthetic.  
OS  
XX  
XX  
XX Key  
FH Location/Qualifiers  
FT 1..15  
FT misc\_feature  
FT /\*tag= a  
FT /note= "Phosphorothioate internucleotide linkage"  
FT 15..19  
FT misc\_feature  
FT /\*tag= d  
FT /note= "Optionally all phosphorothioate internucleotide  
FT linkages"  
FT 16..19  
FT modified\_base  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "Optionally all 3'-O-(2-methoxyhexyl) or all 2'-O-  
FT (2-methoxyethyl)"  
FT 19  
FT misc\_RNA  
FT /\*tag= d  
PN MO200004189-A1.  
XX 27-JAN-2000.  
PD  
XX

```
XX 13-JUL-1999; 99WO-US015886.
PF
XX 14-JUL-1998; 98US-00115043.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD;
XX
XX WPI; 2000-182445/16.
XX
XX Novel modified oligonucleotides, useful in antisense methodologies,
XX PT diagnostics, therapeutics and as research reagents.
XX
XX Example 54; Page 59; 75pp; English.
XX
XX This sequence represents a modified oligonucleotide used in the course of
XX CC the invention. The invention relates to oligonucleotides comprising
XX CC nucleotides covalently linked together by internucleotide linkages where
XX CC at least 1 nucleotide is linked to adjacent nucleotide by a 2',5'-
XX CC internucleotide linkage and bears a 3'-substituent. The oligonucleotides
XX CC can be used in gene therapy and are also useful in antisense
XX CC methodologies, diagnostics, therapeutics and as research reagents
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 514
AA295240/C
ID AA295240 standard; DNA; 19 BP.
XX
XX AA295240;
XX
XX 05-JUN-2000 (first entry)
XX
XX Modified oligonucleotide #3 ISIS # 22110.
XX
XX Antisense oligonucleotide; phosphorothioate; gene therapy; ISIS # 22110;
XX KM research reagent; therapeutic; ss.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
XX FH 1.15
XX FT misc_feature
XX FT /tag= a
XX FT /note= "Phosphorothioate internucleotide linkage"
XX FT 15..19
XX FT /tag= d
XX FT /note= "Optionally all phosphorothioate internucleotide
XX FT linkages"
XX FT 16..19
XX FT /tag= c
XX FT /mod_base= OTHER
XX FT /note= "Optionally all 3'-O-(2-methoxyhexyl) or all 2'-O-
XX FT (2-methoxyethyl)"
XX
XX WO200004189-A1.
XX
XX 27-JAN-2000.
XX
XX 13-JUL-1999; 99WO-US015886.
XX
XX 14-JUL-1998; 98US-00115043.
XX
XX (ISIS-) ISIS PHARM INC.
```

```
XX Manoharan M, Cook PD;
XX
XX WPI; 2000-182445/16.
XX
XX Novel modified oligonucleotides, useful in antisense methodologies,
XX PT diagnostics, therapeutics and as research reagents.
XX
XX Example 54; Page 59; 75pp; English.
XX
XX This sequence represents a modified oligonucleotide used in the course of
XX CC the invention. The invention relates to oligonucleotides comprising
XX CC nucleotides covalently linked together by internucleotide linkages where
XX CC at least 1 nucleotide is linked to adjacent nucleotide by a 2',5'-
XX CC internucleotide linkage and bears a 3'-substituent. The oligonucleotides
XX CC can be used in gene therapy and are also useful in antisense
XX CC methodologies, diagnostics, therapeutics and as research reagents
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 515
AAA06839/C
ID AAA06839 standard; DNA; 19 BP.
XX
XX AAA06839;
XX
XX 19-JUN-2000 (first entry)
XX
XX Modified T-containing oligonucleotide, SEQ ID NO:14.
XX
XX Modified nucleoside; aminoxy group;
XX KM 2'-deoxy-erythro-pentofuranosyl sugar moiety; nuclease resistant;
XX KM hybridisation; binding affinity; ss.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
XX FH 16..19
XX FT modified_base
XX FT /tag= a
XX FT /note= "These nucleotides are substituted with 2'-O-{2-
XX FT [N-(2-amino)ethyl-N-(methyl)]aminoxyethyl} group"
XX
XX WO200008042-A1.
XX
XX 17-FEB-2000.
XX
XX 09-AUG-1999; 99WO-US017986.
XX
XX 07-AUG-1998; 98US-00130973.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Kawasaki AM;
XX
XX WPI; 2000-224020/19.
XX
XX Aminoxy-modified nucleosides and oligonucleotides useful in diagnostic,
XX PT therapeutic and research reagents and for modulating the expression of
XX PT protein in organisms.
XX
XX Example 99; Page 120; 195pp; English.
XX
XX The invention relates to aminoxy-modified nucleosides and
XX CC oligonucleotides and to oligonucleotides that elicit RNase H for cleavage
```

in a complementary nucleic acid strand. It also relates to oligonucleotides wherein at least some of the nucleotides are functionalised to be nuclease resistant, at least some of the nucleotides include a substituent that potentiates hybridisation of the oligonucleotide to a complementary strand, and at least some of the nucleotides include a 2'-deoxy-erythro-pentofuranosyl sugar moiety. The inclusion of one or more aminoxy moieties in such oligonucleotides provides for improved binding of such oligonucleotides to a complementary strand. The oligonucleotides of the invention are used as diagnostic, therapeutic or research reagents, and can be used to modulate gene expression in organisms. The oligonucleotides containing the modified nucleosides have increased nuclease resistance and increased binding affinity to a complementary strand. The present sequence represents an oligonucleotide containing nucleotides substituted with a 2'-O-(2-(2-amino)ethyl-N-(methyl)aminoxyethyl) group

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAA 1537  
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 516  
AAA88952/C  
ID AAA88952 standard; DNA; 19 BP.  
XX  
AC AAA88952;  
XX  
DT 05-MAR-2001 (first entry)  
XX  
DE Oligonucleotide ISIS 22115.  
XX  
KM Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;  
KM dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;  
KM diagnosis; DNA-RNA hybrid; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..15  
FT /\*tag= f  
FT /note= "phosphorothioate linkage"  
FT modified\_base 16  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-O-(2-methoxyethyl)thymidine"  
FT modified\_base 17  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-O-(2-methoxyethyl)thymidine"  
FT modified\_base 18  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-O-(2-methoxyethyl)thymidine"  
FT misc\_RNA 19  
FT /\*tag= e  
FT /label= RNA  
FT modified\_base 19  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "2'-O-(2-methoxyethyl)uridine"  
FT  
XX  
PN WO200066609-A1.  
XX  
PD 09-NOV-2000.  
XX  
PF 03-MAY-2000; 2000WO-US011913.  
XX

03-MAY-1999; 99US-00303586.  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
PI Manoharan M, Mohan V;  
XX  
XX WPI; 2000-672833/65.  
DR  
XX  
XX New oligonucleotides containing sequences with A and B geometry, used to  
PT treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and  
PT bacterial infections, bind to single stranded RNA or DNA.  
XX  
PS Example 54; Page 69; 132pp; English.  
XX  
XX Oligonucleotide ISIS 22115 contains a mixed phosphodiester and  
CC phosphorothioate backbone and has 2'-O-(2-methoxyethyl) chemistry. It was  
CC used in experiments to determine the effects of snake venom  
CC phosphodiesterase and liver homogenate on the stability of  
CC oligonucleotides. Novel oligonucleotides of the invention have both A-  
CC and B-form conformational geometry. The A-form geometry modulates the  
CC binding affinity and nuclease resistance of the oligonucleotide. The B-  
CC form geometry allows the oligonucleotide to serve as substrate for RNase-  
CC H when bound to a target nucleic acid strand. The oligonucleotides can be  
CC used to treat psoriasis and other inflammatory skin conditions, skin  
CC cancers and viral, bacterial and fungal infections, and in various  
CC diagnostic applications  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAA 1537  
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 517  
AAA88965/C  
ID AAA88965 standard; DNA; 19 BP.  
XX  
AC AAA88965;  
XX  
DT 05-MAR-2001 (first entry)  
XX  
DE 2'-Modified chimeric oligonucleotide.  
XX  
KM Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;  
KM dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;  
KM diagnosis; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 16  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-  
FT (F), 2'-ara-(OH), -2'-ara-(OMe)"  
FT modified\_base 17  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-  
FT (F), 2'-ara-(OH), -2'-ara-(OMe)"  
FT modified\_base 18  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-  
FT (F), 2'-ara-(OH), -2'-ara-(OMe)"  
FT modified\_base 19  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT

```
FT /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-
FT (F), 2'-ara-(OH), -2'-ara-(OMe)"
XX
XX WO200066609-A1.
XX
XX 09-NOV-2000.
XX
XX 03-MAY-2000; 2000WO-US011913.
XX
XX 03-MAY-1999; 99US-00303586.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Mohan V;
XX WPI, 2000-672833/65.
XX
XX New oligonucleotides containing sequences with A and B geometry, used to
XX treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX bacterial infections, bind to single stranded RNA or DNA.
XX
XX Example 86; Page 102; 132pp; English.
XX
XX This sequence represents 2'-modified chimeric oligonucleotides containing
XX 2'-modified T. The nucleotides were used to examine the effects of the
XX modifications on nuclease resistance. Novel oligonucleotides of the
XX invention have both A- and B-form conformational geometry. The A-form
XX geometry modulates the binding affinity and nuclease resistance of the
XX oligonucleotide. The B-form geometry allows the oligonucleotide to serve
XX as substrate for RNase-H when bound to a target nucleic acid strand. The
XX oligonucleotides can be used to treat psoriasis and other inflammatory
XX skin conditions, skin cancers and viral, bacterial and fungal infections,
XX and in various diagnostic applications
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2
RESULT 518
AAA88949/C
ID AAA88949 standard; DNA; 19 BP.
XX
XX AAA88949;
XX
XX 05-MAR-2001 (first entry)
XX
XX Oligonucleotide ISIS 22112.
XX
XX Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
XX dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
XX diagnosis; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..19 e
XX /tag= e
XX /note= "phosphorothioate linkage"
XX modified_base 16
XX /tag= a
XX /mod_base= OTHER
XX /note= "3'-O-(2-methoxyethyl)thymidine"
XX modified_base 17
XX /tag= b
XX /mod_base= OTHER
XX /note= "3'-O-(2-methoxyethyl)thymidine"
```

```
FT modified_base 18
FT /tag= c
FT /mod_base= OTHER
FT /note= "3'-O-(2-methoxyethyl)thymidine"
XX modified_base 19
XX /tag= d
XX /mod_base= OTHER
XX /note= "3'-O-(2-methoxyethyl)thymidine"
XX
XX WO200066609-A1.
XX
XX 09-NOV-2000.
XX
XX 03-MAY-2000; 2000WO-US011913.
XX
XX 03-MAY-1999; 99US-00303586.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Mohan V;
XX WPI, 2000-672833/65.
XX
XX New oligonucleotides containing sequences with A and B geometry, used to
XX treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX bacterial infections, bind to single stranded RNA or DNA.
XX
XX Example 54; Page 69; 132pp; English.
XX
XX Oligonucleotide ISIS 22112 contains a phosphorothioate backbone and has
XX 3'-O-(2-methoxyethyl) chemistry. It was used in experiments to determine
XX the effects of snake venom phosphodiesterase and liver homogenate on the
XX stability of oligonucleotides. Novel oligonucleotides of the invention
XX have both A- and B-form conformational geometry. The A-form geometry
XX modulates the binding affinity and nuclease resistance of the
XX oligonucleotide. The B-form geometry allows the oligonucleotide to serve
XX as substrate for RNase-H when bound to a target nucleic acid strand. The
XX oligonucleotides can be used to treat psoriasis and other inflammatory
XX skin conditions, skin cancers and viral, bacterial and fungal infections,
XX and in various diagnostic applications
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2
RESULT 519
AAA88950/C
ID AAA88950 standard; DNA; 19 BP.
XX
XX AAA88950;
XX
XX 05-MAR-2001 (first entry)
XX
XX Oligonucleotide ISIS 22113.
XX
XX Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
XX dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
XX diagnosis; DNA-RNA hybrid; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..19 f
XX /tag= f
XX /note= "phosphorothioate linkage"
XX modified_base 16
```

FT		/tag= a
FT		/mod_base= OTHER
FT		/note= "2'-O-(2-methoxyethyl) thymidine"
FT		17
FT		/tag= b
FT		/mod_base= OTHER
FT		/note= "2'-O-(2-methoxyethyl) thymidine"
FT		18
FT		/tag= c
FT		/mod_base= OTHER
FT		/note= "2'-O-(2-methoxyethyl) thymidine"
FT		19
FT		/tag= e
FT		/label= RNA
FT		19
FT		/tag= d
FT		/mod_base= OTHER
FT		/note= "2'-O-(2-methoxyethyl) uridine"
XX		
PN		WO20066609-A1.
PD		
PD		09-NOV-2000.
XX		
XX		03-MAY-2000; 2000MO-US011913.
PE		
PR		03-MAY-1999; 99US-00303586.
XX		
PA		(ISIS-) ISIS PHARM INC.
XX		
Pt		Manoharan M, Mohan V;
DR		WPI; 2000-672833/65.
XX		
PT		New oligonucleotides containing sequences with A and B geometry, used to
PT		treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
PT		bacterial infections, bind to single stranded RNA or DNA.
XX		
PS		Example 54; Page 69; 132pp; English.
CC		
CC		Oligonucleotide ISIS 22113 contains a phosphorothioate backbone and has
CC		2',-O-(2-methoxyethyl) chemistry. It was used in experiments to determine
CC		the effects of snake venom phosphodiesterase and liver homogenate on the
CC		stability of oligonucleotides. Novel oligonucleotides of the invention
CC		have both A- and B-form conformational geometry. The A-form geometry
CC		modulates the binding affinity and nuclease resistance of the
CC		oligonucleotide. The B-form geometry allows the oligonucleotide to serve
CC		as substrate for RNase-H when bound to a target nucleic acid strand. The
CC		oligonucleotides can be used to treat psoriasis and other inflammatory
CC		skin conditions, skin cancers and viral, bacterial and fungal infections,
CC		and in various diagnostic applications
SQ		
		Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
		Query Match 1.1%; Score 14.8; DB 1; Length 19;
		Best Local Similarity 88.9%; Pred. No. 4.6e+02;
		Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0.
Cy	1520	AAAAAAAAAAGTAAA 1537
Db	19	AAAAAAAAAAAAAAAAAA 2
RESULT 520		
AAAA88951/C		
ID	AAAA88951	standard; DNA; 19 BP.
AC	XXXX	
AC	AAAA88951;	
DT	05-MAR-2001	(first entry)
XX		Oligonucleotide ISIS 22114.
DE		
XX		
XX		Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;

Query Match	1.15	Score 14.0	DB 1	Length 19
Best Local Similarity	88.9%	Pred. No. 4.6e+02		
Matches	16	Conservative	0	Mismatches 2; Indels 0; Gaps 0;
QY	1520	AAAAAAAAAAGTAAAA	1537	
DB	19	AAAAAAAAAAAAAAAAAAAA	2	

RESULT 521  
AAA88947/c

AAA88947 standard; DNA, 19 BP.

```

XX AAA8947;
AC 05-MAR-2001 (first entry)
XX
XX Oligonucleotide ISIS 22110.
DE
XX Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
KM dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
XX diagnosis; ss.
XX
XX Synthetic.
OS
XX
XX Key
FH modified_base
FT 16 Location/Qualifiers
FT /*tag= a
FT /mod_base= OTHER
FT /note= "3'-O-(2-methoxyethyl)thymidine"
FT 17
FT modified_base
FT 17 /*tag= b
FT /mod_base= OTHER
FT /note= "3'-O-(2-methoxyethyl)thymidine"
FT 18
FT modified_base
FT /*tag= c
FT /mod_base= OTHER
FT /note= "3'-O-(2-methoxyethyl)thymidine"
FT 19
FT modified_base
FT /*tag= d
FT /mod_base= OTHER
FT /note= "3'-O-(2-methoxyethyl)thymidine"
XX
XX WO20006609-A1.
XX
XX 09-NOV-2000.
XX
XX 03-MAY-2000; 2000WO-US011913.
XX
XX 03-MAY-1999; 99US-00303586.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Mohan V;
XX
XX WPI: 2000-672833/65.
XX
XX New oligonucleotides containing sequences with A and B geometry, used to
XX treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX bacterial infections, bind to single stranded RNA or DNA.
XX
XX Example 54; Page 69; 132pp; English.
XX
XX Oligonucleotide ISIS 22110 contains a phosphodiester backbone and has 3'-
XX O-(2-methoxyethyl) chemistry. It was used in experiments to determine the
XX effects of snake venom phosphodiesterase and liver homogenate on the
XX stability of oligonucleotides. Novel oligonucleotides of the invention
XX have both A- and B-form conformational geometry. The A-form geometry
XX modulates the binding affinity and nuclease resistance of the
XX oligonucleotide. The B-form geometry allows the oligonucleotide to serve
XX as substrate for RNase-H when bound to a target nucleic acid strand. The
XX oligonucleotides can be used to treat psoriasis and other inflammatory
XX skin conditions, skin cancers and viral, bacterial and fungal infections,
XX and in various diagnostic applications
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred.No.4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

RESULT 522
AAA8948/c
ID AAA8948 standard; DNA; 19 BP.
XX
XX AAA8948;
AC
XX
XX 05-MAR-2001 (first entry)
DE
XX Oligonucleotide ISIS 22111.
XX
XX Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
KM dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
XX diagnosis; DNA-RNA hybrid; ss.
XX
XX Synthetic.
OS
XX
XX Key
FH modified_base
FT 16 Location/Qualifiers
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)thymidine"
FT 17
FT modified_base
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)thymidine"
FT 18
FT modified_base
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)thymidine"
FT 19
FT misc_RNA
FT /*tag= e
FT /label= RNA
FT 19
FT modified_base
FT /*tag= d
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)uridine"
XX
XX WO20006609-A1.
XX
XX 09-NOV-2000.
XX
XX 03-MAY-2000; 2000WO-US011913.
XX
XX 03-MAY-1999; 99US-00303586.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Mohan V;
XX
XX WPI: 2000-672833/65.
XX
XX New oligonucleotides containing sequences with A and B geometry, used to
XX treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX bacterial infections, bind to single stranded RNA or DNA.
XX
XX Example 54; Page 69; 132pp; English.
XX
XX Oligonucleotide ISIS 22111 contains a phosphodiester backbone and has 2'-
XX O-(2-methoxyethyl) chemistry. It was used in experiments to determine the
XX effects of snake venom phosphodiesterase and liver homogenate on the
XX stability of oligonucleotides. Novel oligonucleotides of the invention
XX have both A- and B-form conformational geometry. The A-form geometry
XX modulates the binding affinity and nuclease resistance of the
XX oligonucleotide. The B-form geometry allows the oligonucleotide to serve
XX as substrate for RNase-H when bound to a target nucleic acid strand. The
XX oligonucleotides can be used to treat psoriasis and other inflammatory
XX skin conditions, skin cancers and viral, bacterial and fungal infections,
XX and in various diagnostic applications
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;

```

Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 523  
AAA71630/C  
ID AAA71630 standard; DNA; 19 BP.

AC AAA71630;  
XX  
XX 14-DEC-2000 (first entry)  
XX  
XX Phosphorochioate 20-mer primer DNA #1.  
DE  
XX Phosphorochioate; primer; oligomer synthesis; antisense therapy; ss.  
XX  
XX Synthetic.

OS  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "phosphorochioate linkage"

PN EPI028124-A2.

PD 16-AUG-2000.

PF 06-SEP-1999; 99EP-00307066.

PR 04-FEB-1999; 99US-0118564P.

PR 09-APR-1999; 99US-00288679.

PA (ISIS-) ISIS PHARM INC.

PI Ravikumar VT, Manoharan M, Capaldi DC, Krotz A, Cole DL;

PI Guzev A;

XX WPI; 2000-500332/45.

XX Novel method for the production of oligomers with reduced exocyclic  
PT adducts comprises treatment with deprotecting and cleaving reagents.

PS Example 2; Page 17; 33pp; English.

XX This invention describes a novel synthetic method (M) comprising: (a)  
CC providing a sample comprising a number of oligomers of formula (I); (b)  
CC contacting the sample with a deprotecting agent to remove R t groups from  
CC the oligomers; and (c) reacting the oligomer with a cleaving reagent. The  
CC method is used to produce oligomeric compounds for use in antisense and  
CC oligonucleotide therapies. The method enables the synthesis of oligomers  
CC with a reduction in the number acrylonitrile groups attached.  
CC Acrylonitrile has been demonstrated to be a potent carcinogen in rats.  
CC This sequence represents a phosphorochioate 20-mer primer which is used  
CC in the method of the invention

XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 524  
AAC62454/C

ID AAC62454 standard; DNA; 19 BP.

AC AAC62454;

XX 07-FEB-2001 (first entry)

DE Cleavage of nucleic acids from solid supports assay oligonucleotide #3.

XX Nucleic acid cleavage; solid support; DNA-RNA hybrid;  
KW affinity chromatography; sequencing; mutagenesis; DNA preparation;  
KW nucleic acid purification; ss.

XX Synthetic.

XX Key Location/Qualifiers  
FH misc\_RNA 10  
FT /tag= a

PN WO200058329-A1.

PD 05-OCT-2000.

PF 28-MAR-2000; 2000WO-GB001190.

PR 29-MAR-1999; 99GB-00007245.

PA (GOLD/) GOLDSBOROUGH A.

DR WPI; 2000-664908/64.

XX Detaching nucleic acid molecule comprising unconventional nucleotide  
PT incorporated at predetermined site from a solid support involves cleaving  
XX the nucleic acid molecule at the site of unconventional nucleotide.

XX Example 3; Page 34; 47pp; English.

XX The present invention is concerned with the cleavage of nucleic acids  
CC from solid supports. This is carried out by adding a non-conventional  
CC nucleotide into the nucleic acid attached to the support, so that it is  
CC recognised and cleaved by a specific DNA glycosylase and the sequence is  
CC released. This is useful in many molecular biological procedures such as  
CC sequencing, in vitro amplifications, cDNA and template preparation, DNA-  
CC based assays, mutagenesis procedures, nucleic acid purification and  
CC affinity chromatography. The present sequence is an oligonucleotide used  
CC in assays to demonstrate the methods of the invention

XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 525

ID AAF31458/C

AC AAF31458;

XX 10-APR-2001 (first entry)

DE Oligonucleotide ISIS 109989.

XX Gene expression; gene therapy; diagnosis; ss.

XX Synthetic.

PN WO200102423-A2.



```
PD 11-JAN-2001.
XX
XX 07-JUL-2000; 2000WO-US018609.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V,
XX
XX WPI, 2001-138119/14.
XX
XX Guanidinium functionalized oligomers prepared from corresponding monomer
XX units, are hybridizable with a specific RNA or DNA sequence, useful for
XX diagnostic and therapeutic purposes.
XX
XX Example 26; Page 54; 108pp; English.
XX
XX The present invention relates to nucleotide oligomers comprising monomer
XX units. Oligomers modulate gene expression when hybridized by a single- or
XX double-stranded nucleic acid. They are useful for gene therapy,
XX diagnostic and investigative purposes
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2
RESULT 526
AAF31564/C
ID AAF31564 standard; DNA; 19 BP.
XX
XX AAF31564;
XX
XX 09-APR-2001 (first entry)
XX
XX ISIS sequence 32327.
XX
XX DNA/RNA hybrid; oligomer; C3' methylene hydrogen phosphate; AIDS;
XX atherosclerosis; ss.
XX
XX Synthetic.
XX
XX WO200102419-A1.
XX
XX 11-JAN-2001.
XX
XX 05-JUL-2000; 2000WO-US040304.
XX
XX 07-JUL-1999; 99US-00349033.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cook PD, Manoharan M, Malar M, An H;
XX
XX WPI, 2001-138117/14.
XX
XX New oligomers for use as research reagent, for treating disease caused by
XX undesired production of proteins, and for diagnosing and treating AIDS,
XX atherosclerosis.
XX
XX Example 46; Page 74; 110pp; English.
XX
XX The present invention relates to C3' methylene hydrogen phosphate
XX oligomers. The oligomers may be used as research reagents, for treating
XX disease caused by undesired production of proteins and for diagnosing and
XX treating AIDS and atherosclerosis
```

```
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 15 T; 4 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2
RESULT 527
AAH46460/C
ID AAH46460 standard; DNA; 19 BP.
XX
XX AAH46460;
XX
XX 14-SEP-2001 (first entry)
XX
XX Oligonucleotide #8.
XX
XX Phosphorothioate; anti-viral therapy; stereochemical pathway; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX PH modified_base 1..19
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "All bases are phosphorothioate"
XX FT modified_base 1
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "Modified with 2'-O-methoxyethyl"
XX
XX US6242591-B1.
XX
XX 05-JUN-2001.
XX
XX 11-JAN-2000; 2000US-00481486.
XX
XX 15-OCT-1997; 97US-00950779.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cole DL, Ravikumar VT, Chervallath ZS;
XX
XX WPI, 2001-407218/43.
XX
XX Preparing sulfurized 2' substituted phosphorothioate oligonucleotides
XX useful in biological research, comprises phosphorylating the 5'-hydroxyl
XX of a nucleic acid having a nucleoside with a 2' modification.
XX
XX Example 12; Col 7; 7pp; English.
XX
XX The present invention relates to a method for preparing phosphorothioate
XX oligonucleotides having at least one nucleoside with a 2' modification.
XX The method comprises phosphorylating the 5'-hydroxyl of a nucleic acid
XX group having at least one nucleoside with a 2' modification in an
XX acetonitrile. The present sequence was used to illustrate the method of
XX the present invention. The method is useful for synthesizing sulphurised
XX 2' substituted phosphorothioate oligonucleotides, which may be used in
XX molecular biological research, in applications such as anti-viral
XX therapy, and for determining the stereochemical pathways of certain
XX enzymes which recognise nucleic acids
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Oy      1520 AAAAAAAAAAGTAAA 1537
      |||||
      19 AAAAAAAAAAAAAAAA 2

RESULT 528
AAH25737/C
ID      AAH25737 standard; DNA; 19 BP.
XX
XX      AAH25737;
XX
XX      14-AUG-2001 (first entry)
XX
XX      Human type II RNase H substrate oligonucleotide #4.
DE
XX      Human; RNase H type II; RNase H1 cleavage substrate; antisense therapy;
KW      gene therapy; primer; phosphorothioate backbone; ss.
XX
XX      Synthetic.
OS
XX      Key
XX      Location/Qualifiers
XX      modified_base
XX      1..19
XX      /mod_base= OTHER
XX      /note= "optionally phosphorothioate backbone"
XX      modified_base
XX      16..19
XX      /tag= b
XX      /mod_base= OTHER
XX      /note= "optionally 3'-O-(2-methoxyethyl) or 2'-O-(2-
XX      methoxyethyl)"
XX
XX      WO200123613-A1.
XX
XX      05-APR-2001.
XX
XX      29-SEP-2000; 2000WO-US026729.
XX
XX      30-SEP-1999; 99US-00409926.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke ST, Lima WF, Wu H, Manoharan M;
XX
XX      WPI; 2001-343164/36.
XX
XX      Chimeric oligonucleotides that can serve as substrates for human RNase
XX      H1, useful for enhancing the effectiveness of antisense gene therapies.
XX
XX      Example 54; Page 88; 178pp; English.
XX
XX      The present invention provides a number of DNA-RNA oligonucleotides which
XX      can act as substrates for human RNase H1 (a type II RNase). The sequence
XX      consists of two portions, one of which is capable of supporting cleavage
XX      of a complementary target RNA and the other of which is incapable of
XX      supporting such cleavage. These can be used to enhance the effectiveness
XX      of antisense therapies. The present sequence is an RNase H substrate used
XX      in the exemplification of the invention
XX
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX      Query Match
XX      1.1%; Score 14.8; DB 1; Length 19;
XX      Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX      Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy      1520 AAAAAAAAAAGTAAA 1537
      |||||
      19 AAAAAAAAAAAAAAAA 2

RESULT 529
AAH25738/C
ID      AAH25738 standard; DNA; 19 BP.
XX
```

```
AC      AAH25738;
XX
XX      14-AUG-2001 (first entry)
XX
XX      Human type II RNase H substrate oligonucleotide #5.
DE
XX      Human; RNase H type II; RNase H1 cleavage substrate; antisense therapy;
KW      gene therapy; primer; phosphorothioate backbone; ss.
XX
XX      Synthetic.
OS
XX      Key
XX      Location/Qualifiers
XX      modified_base
XX      1..19
XX      /tag= a
XX      /mod_base= OTHER
XX      /note= "optionally phosphorothioate backbone"
XX      modified_base
XX      16..19
XX      /tag= b
XX      /mod_base= OTHER
XX      /note= "optionally 3'-O-(2-methoxyethyl) or 2'-O-(2-
XX      methoxyethyl)"
XX      misc_RNA
XX      19
XX      /tag= c
XX
XX      WO200123613-A1.
XX
XX      05-APR-2001.
XX
XX      29-SEP-2000; 2000WO-US026729.
XX
XX      30-SEP-1999; 99US-00409926.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke ST, Lima WF, Wu H, Manoharan M;
XX
XX      WPI; 2001-343164/36.
XX
XX      Chimeric oligonucleotides that can serve as substrates for human RNase
XX      H1, useful for enhancing the effectiveness of antisense gene therapies.
XX
XX      Example 54; Page 88; 178pp; English.
XX
XX      The present invention provides a number of DNA-RNA oligonucleotides which
XX      can act as substrates for human RNase H1 (a type II RNase). The sequence
XX      consists of two portions, one of which is capable of supporting cleavage
XX      of a complementary target RNA and the other of which is incapable of
XX      supporting such cleavage. These can be used to enhance the effectiveness
XX      of antisense therapies. The present sequence is an RNase H substrate used
XX      in the exemplification of the invention
XX
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;
XX
XX      Query Match
XX      1.1%; Score 14.8; DB 1; Length 19;
XX      Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX      Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy      1520 AAAAAAAAAAGTAAA 1537
      |||||
      19 AAAAAAAAAAAAAAAA 2

RESULT 530
AAH61192/C
ID      AAH61192 standard; DNA; 19 BP.
XX
XX      AAH61192;
XX
XX      10-SEP-2001 (first entry)
XX
XX      Cdc25 hs ribozyme binding site SEQ ID NO:3616.
XX
XX      Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
```

KW recognition site; target; ribozyme binding site; eye disease; vulnary;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antiproliferative; dermatological; antidiabetic; antisticking;  
KW antisticking; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; sebaceous wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX  
XX Homo sapiens.  
OS Synthetic.  
XX  
XX WO200130362-A2.  
XX  
XX 03-MAY-2001.  
XX  
XX 26-OCT-2000; 2000MO-US029500.  
XX  
XX 26-OCT-1999; 99US-0161532P.  
XX  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Robbins JM, Tritz R;  
XX  
XX WPI; 2001-300427/31.  
XX  
XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX  
XX Example 1; Page 335; 408pp; English.  
XX  
XX The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antiproliferative,  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisticking,  
CC ophthalmological, vulnary, keratolytic and nuclease activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or sebaceous wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing of  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX  
XX Sequence 19 BP; 10 A; 2 C; 3 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1305 ATTTTATTTATTTGAGA 1332  
DB 18 ATTTCTTATTTGAGA 1  
RESULT 531  
AAH513564  
ID AAH513564 standard; DNA; 19 BP.  
XX  
XX AAH513564;  
XX  
XX 17-DEC-2001 (first entry)  
XX  
XX PCR primer 2 used to amplify PAC 10406 (70 SP6) clone STS sequence.  
DE

XX  
KW Human; VMGLOM; glomulin; venous malformation glomangioma; PCR primer;  
KW STS; sequence tagged site; PAC 10406; ss.  
XX  
XX  
XX Homo sapiens.  
OS  
XX WO200160856-A2.  
XX  
XX 23-AUG-2001.  
XX  
XX 16-FEB-2001; 2001WO-EP001760.  
XX  
XX 16-FEB-2000; 2000EP-00870022.  
XX  
XX 10-APR-2000; 2000US-0195777P.  
XX  
XX 22-DEC-2000; 2000EP-00870320.  
XX  
XX (UYLO-) UNIV CATHOLIQUE LOUVAIN.  
XX  
XX Viikula M;  
XX  
XX WPI; 2001-557643/62.  
XX  
XX  
XX New VMGLOM genes and polypeptides, useful in gene therapy or for  
PT preventing, treating or alleviating disorders with vascular component,  
PT e.g. varicosities, cardiopathies, cerebral disorders or cancer.  
XX  
XX Disclosure; Page 70; 157pp; English.  
XX  
XX The present invention relates to the isolation of novel human and mouse  
CC VMGLOM polypeptides (long form and short form), and the nucleic acid  
CC molecules encoding them. VMGLOMS (also referred to as glomulins) are a  
CC subtype of venous malformations (VMs) called glomangiomas. In humans,  
CC VMGLOM has been mapped to chromosome 1p21-22. VMGLOMS and the nucleic  
CC acids encoding for them are useful as a medicament or for incorporation  
CC into a diagnostic kit. Such medicaments are useful for preventing,  
CC treating or alleviating disorders with a vascular component, particularly  
CC where alteration of vascular smooth muscle cell phenotype is needed, e.g.  
CC varicosities, cardiopathies or cardiomyopathies, cerebral disorders and  
CC cancer. The nucleic acids are also useful in gene therapy. The present  
CC sequence for PCR primer 2 is used to amplify PAC 10406 (70 SP6) clone STS  
CC sequence in the methods of the present invention  
XX  
XX Sequence 19 BP; 1 A; 5 C; 6 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 983 GCGGACGTCCTTGCTCG 1000  
DB 2 GCGGACGTCCTTGCTCG 19  
RESULT 532  
AAC83664/C  
ID AAC83664 standard; DNA; 19 BP.  
XX  
XX AAC83664;  
XX  
XX 02-MAR-2001 (first entry)  
XX  
XX 2'-O-N-[2-(dimethylamino)ethyl]acetamidol-modified oligo ISIS #32335.  
DE  
XX  
XX 2'-O-acetamidol; diagnostic; kinase modulator; nuclease resistance;  
KW tumour formation; cancer; protein kinase C expression;  
KW cell adhesion molecule expression; multidrug resistance; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX Key Location/Qualifiers  
FH modified\_base 16..19  
FT /\*tag= a  
FT /mod\_base= OTHER

```
FT /note= "2'-O-N-[2-(dimethylamino)ethylacetamido] 5MeU"
XX
XX US6147200-A.
XX
XX 14-NOV-2000.
XX
XX 19-AUG-1999; 99US-00378568.
XX
XX 19-AUG-1999; 99US-00378568.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Fraser AS, Prakash TP, Kawasaki AM,
XX
XX WPI; 2001-069824/08.
XX
XX New 2'-O-acetamido modified nucleosides (I) used to produce
XX oligonucleotides which have enhanced nuclease resistance and superior
XX hybridization properties than prior art.
XX
XX Example 12; Col 28; 29pp; English.
XX
XX The present sequence is a modified oligonucleotide, 2'-O-acetamido-
XX modified nucleosides were used to produce oligonucleotides which have
XX enhanced nuclease resistance and superior hybridisation properties than
XX prior art. The oligomeric compounds are useful for identification or
XX quantification of ribonucleic acid and deoxyribonucleic acid or for
XX modulating the activity of an ribonucleic acid or deoxyribonucleic acid
XX molecule. They have a modified nucleoside monomer and are specifically
XX hybridisable with a preselected nucleotide sequence of a single-stranded
XX or double-stranded target deoxyribonucleic acid or ribonucleic acid
XX molecule. The oligomers are further useful in a ras-luciferase fusion
XX system using ras-luciferase transactivation. They are useful in abnormal
XX cell proliferation and tumour formation and modulation of expression of
XX protein kinase C and cell adhesion molecules such as ICAM. They are
XX useful in the modulation of proteins related to multivirus resistance and
XX viral genomic nucleic acids such as HIV, herpes viruses, Epstein-Barr
XX virus, cytomegalovirus, papillomavirus, hepatitis C virus and influenza
XX virus
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 19 AAAAAAAAAAAAAAAAAA 2
XX
XX RESULT 533
XX AAK98526/C
XX ID AAK98526 standard; DNA; 19 BP.
XX
XX AAK98526;
XX
XX 16-APR-2002 (first entry)
XX
XX Nucleic acid quantitative analysis related oligonucleotide #1.
XX
XX Target detection; quantitative analysis; probe; medical diagnosis;
XX forensics; bacterial screening; tissue typing; gene expression analysis;
XX genotyping; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /mod_base= OTHER
XX /note= "modified by thiol"
XX
XX
```

```
PN WO200202810-A2.
XX
XX 10-JAN-2002.
XX
XX 02-JUL-2001; 2001WO-EP007575.
XX
XX 01-JUL-2000; 2000DE-01033334.
XX
XX (CLON-) CLONDIAG CHIP TECHNOLOGIES GMBH.
XX
XX Bickel R, Ehrlich R, Ellinger T, Ermentraut E, Kaiser T;
XX
XX Schulz T, Wagner G;
XX
XX WPI; 2002-154760/20.
XX
XX Determining targets by interaction with probe array, useful e.g. for
XX diagnosis, based on detecting formation of precipitate at specific probe
XX sites.
XX
XX Example 5; Page 47; 92pp; German.
XX
XX The present invention relates to a method for the qualitative and
XX quantitative detection of targets in a sample by molecular interaction
XX between the target and probes in an array. The method can be used to
XX detect interactions between nucleic acids, antigens and antibodies or
XX receptor and ligands, particularly in applications such as medical
XX diagnosis, forensic science, bacterial screening, tissue typing for
XX transplantation, monitoring gene expression, and genotyping. The present
XX sequence is a modifying oligonucleotide used in the exemplification of
XX the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 19 AAAAAAAAAAAAAAAAAA 2
XX
XX RESULT 534
XX ABA91949/C
XX ID ABA91949 standard; DNA; 19 BP.
XX
XX ABA91949;
XX
XX 23-MAY-2002 (first entry)
XX
XX Methyl thioethyl modified oligonucleotide.
XX
XX 2'-O-alkyl oligonucleotide; nuclease resistance; diagnosis; therapy; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 16 /*tag= a
XX /mod_base= OTHER
XX /note= "2'-methyl thioethyl thymidine"
XX
XX modified_base 17 /*tag= b
XX /mod_base= OTHER
XX /note= "2'-methyl thioethyl thymidine"
XX
XX modified_base 18 /*tag= c
XX /mod_base= OTHER
XX /note= "2'-methyl thioethyl thymidine"
XX
XX modified_base 19 /*tag= d
XX /mod_base= OTHER
XX /note= "2'-methyl thioethyl thymidine"
XX
XX
```

```
XX XX US627982-B1.
PN XX
PD 21-AUG-2001.
XX XX
PF 20-AUG-1999; 99US-00378665.
XX XX
PR 20-AUG-1999; 99US-00378665.
XX XX
PA (ISIS-) ISIS PHARM INC.
XX XX
PI Fraser AS, Manoharan M, Cook PD, Jung ME, Kawasaki AM;
XX XX
DR WPI; 2002-235143/29.
XX XX
PT Alkylation of alcohols, amines, or thiols, useful for preparing
PT nucleosides that are precursors for preparation of oligomeric compounds
PT beneficial as therapeutics, involves use of cyclic sulfate intermediates.
XX XX
PS Example 15; Col 35; 45pp; English.
XX XX
CC The present sequence is that of a chimeric oligonucleotide having some 2'
CC -methyl thioethyl modifications. This was compared with oligonucleotides
CC with methoxyethoxy (see ABA91950) and dimethylaminopropyl (see ABA91951)
CC modifications for resistance to snake venom phosphodiesterase. The assay
CC revealed the nuclease resistance of the modified oligomers. The invention
CC provides methods for the alkylation of alcohols, amines, thiols and their
CC derivatives by cyclic sulfate intermediates. In particular, methods for
CC the alkylation of the 2', 3' or 5'-hydroxy position of nucleosides and
CC their analogues with cyclic sulfates to form the 2', 3' or 5'-O-alkyl
CC sulfate modified compounds are disclosed. Displacement of the 2', 3' or
CC 5'-O-sulfate with a nucleophile provides 2', 3' or 5'-O-modified
CC nucleosides and their analogues. The methods are especially useful for
CC the preparation of 2'-O-alkyl nucleosides, nucleosides and nucleoside
CC surrogates that are precursors for the preparation of oligomeric
CC compounds useful as therapeutics, diagnostics and research reagents
XX XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX XX
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
Db 19 AAAAAAAAAAAAAAAAAA 2
XX XX
RESULT 535
ABA91951/C
ID ABA91951 standard; DNA; 19 BP.
XX XX
AC ABA91951;
XX XX
DT 23-MAY-2002 (first entry)
XX XX
DE Dimethylaminopropyl modified oligonucleotide.
XX XX
KW 2'-O-alkyl oligonucleotide; nuclease resistance; diagnosis; therapy; ss.
XX XX
OS Synthetic.
XX XX
FH Key Location/Qualifiers
FH 16
FT modified_base
FT /mod_base= OTHER
FT /note= "2'-dimethylaminopropyl thymidine"
FT 17
FT modified_base
FT /mod_base= OTHER
FT /note= "2'-dimethylaminopropyl thymidine"
FT 18
FT modified_base
FT /mod_base= OTHER
FT /tag= c
```

```
FT FT /mod_base= OTHER
FT FT /note= "2'-dimethylaminopropyl thymidine"
FT FT 19
FT modified_base
FT /tag= d
FT /mod_base= OTHER
FT FT /note= "2'-dimethylaminopropyl thymidine"
XX XX
XX XX US627982-B1.
XX XX
PD 21-AUG-2001.
XX XX
PF 20-AUG-1999; 99US-00378665.
XX XX
PR 20-AUG-1999; 99US-00378665.
XX XX
PA (ISIS-) ISIS PHARM INC.
XX XX
PI Fraser AS, Manoharan M, Cook PD, Jung ME, Kawasaki AM;
XX XX
DR WPI; 2002-235143/29.
XX XX
PT Alkylation of alcohols, amines, or thiols, useful for preparing
PT nucleosides that are precursors for preparation of oligomeric compounds
PT beneficial as therapeutics, involves use of cyclic sulfate intermediates.
XX XX
PS Example 15; Col 35; 45pp; English.
XX XX
CC The present sequence is that of a chimeric oligonucleotide having some 2'
CC -dimethylaminopropyl modifications. This was compared with
CC oligonucleotides with methyl thioethyl (see ABA91949) and methoxyethoxy
CC (see ABA91950) modifications for resistance to snake venom
CC phosphodiesterase. The assay revealed the nuclease resistance of the
CC modified oligomers. The invention provides methods for the alkylation of
CC alcohols, amines, thiols and their derivatives by cyclic sulfate
CC intermediates. In particular, methods for the alkylation of the 2', 3' or
CC 5'-hydroxy position of nucleosides and their analogues with cyclic
CC sulfates to form the 2', 3' or 5'-O-alkyl sulfate modified compounds are
CC disclosed. Displacement of the 2', 3' or 5'-O-sulfate with a nucleophile
CC provides 2', 3' or 5'-O-modified nucleosides and their analogues. The
CC methods are especially useful for the preparation of 2'-O-alkyl
CC nucleosides, nucleosides and nucleoside surrogates that are precursors
CC for the preparation of oligomeric compounds useful as therapeutics,
CC diagnostics and research reagents
XX XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX XX
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
Db 19 AAAAAAAAAAAAAAAAAA 2
XX XX
RESULT 536
ABA91950/C
ID ABA91950 standard; DNA; 19 BP.
XX XX
AC ABA91950;
XX XX
DT 23-MAY-2002 (first entry)
XX XX
DE Methoxyethoxy modified oligonucleotide.
XX XX
KW 2'-O-alkyl oligonucleotide; nuclease resistance; diagnosis; therapy; ss.
XX XX
OS Synthetic.
XX XX
FH Key Location/Qualifiers
FH 16
FT modified_base
FT /mod_base= OTHER
FT /tag= a
```

```
FT      /note= "2'-methoxyethoxy thymidine"  
FT      17  
FT      /*tag= b  
FT      /mod_base= OTHER  
FT      /note= "2'-methoxyethoxy thymidine"  
FT      18  
FT      /*tag= c  
FT      /mod_base= OTHER  
FT      /note= "2'-methoxyethoxy thymidine"  
FT      19  
FT      /*tag= d  
FT      /mod_base= OTHER  
FT      /note= "2'-methoxyethoxy thymidine"  
FT  
FT  
FT      US6277982-B1.  
XX  
XX      21-AUG-2001.  
XX  
XX      20-AUG-1999; 99US-00378665.  
XX  
XX      20-AUG-1999; 99US-00378665.  
XX  
XX      (ISIS-) ISIS PHARM INC.  
XX  
XX      Fraser AS, Manoharan M, Cook PD, Jung ME, Kawasaki AM,  
XX      WPI; 2002-235143/29.  
XX  
XX      Alkylation of alcohols, amines, or thiols, useful for preparing  
PT      nucleosides that are precursors for preparation of oligomeric compounds  
PT      beneficial as therapeutics, involves use of cyclic sulfate intermediates.  
XX  
XX      Example 15; Col 35; 45pp; English.  
XX  
XX      The present sequence is that of a chimeric oligonucleotide having some 2'  
CC      -methoxyethoxy modifications. This was compared with oligonucleotides  
CC      with methyl thioethyl (see AB91949) and dimethylaminopropyl (see  
CC      AB91951) modifications for resistance to snake venom phosphodiesterase.  
CC      The assay revealed the nuclease resistance of the modified oligomers. The  
CC      invention provides methods for the alkylation of alcohols, amines, thiols  
CC      and their derivatives by cyclic sulfate intermediates. In particular,  
CC      method for the alkylation of the 2', 3' or 5'-hydroxy position of  
CC      nucleosides and their analogues with cyclic sulfates to form the 2', 3'  
CC      or 5'-O-alkyl sulfate modified compounds are disclosed. Displacement of  
CC      the 2', 3' or 5'-O-sulfate with a nucleophile provides 2', 3' or 5'-O-  
CC      modified nucleosides and their analogues. The methods are especially  
CC      useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and  
CC      nucleoside surrogates that are precursors for the preparation of  
CC      oligomeric compounds useful as therapeutics, diagnostics and research  
XX      reagents  
XX  
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;  
SQ  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY      1520 AAAAAAAAAAGTAAA 1537  
DB      19 AAAAAAAAAAAAAAAAAA 2  
RESULT 537  
ABLS1520/C  
ID      ABL51520 standard; DNA; 19 BP.  
XX  
XX      ABL51520;  
XX  
XX      01-JUL-2002 (first entry)  
XX  
XX      Tailing reaction related exemplary primer biotin-dT18U SEQ ID NO:1.  
XX  
XX      Tailing reaction; tailed primer; primer; probe; identification;  
KW
```

```
KW      detection; linear amplification scheme; chain extending enzyme;  
KW      telomerase; ss.  
XX  
XX      Synthetic.  
OS  
XX  
XX      Key  
FT      modified_base 1  
FT      /*tag= a  
FT      /mod_base= OTHER  
FT      /note= "biotinylated"  
FT      19  
FT      misc_RNA  
FT      /*tag= b  
FT  
FT  
FT      US2002031776-A1.  
XX  
XX      14-MAR-2002.  
XX  
XX      26-JUL-2001; 2001US-00917138.  
XX  
XX      28-MAY-1999; 99US-0136545P.  
XX      25-MAY-2000; 2000US-00580358.  
XX  
XX      (TULIS/) TULIS R H.  
XX      (STREIF/) STREIFEL J A.  
XX  
XX      Tullis RH, Streifel JA;  
XX      WPI; 2002-361176/39.  
XX  
XX      Identifying and detecting nucleic acids, particularly DNA hybridization  
PT      probes, involves employing chain extending enzymes (e.g. telomerase) to  
PT      elongate probes to render them readily detectable.  
XX  
XX      Example 1; Page 5; 10pp; English.  
XX  
XX      The present invention describes a method for detecting a nucleic acid  
CC      probe, which comprises using chain extending enzymes to elongate probes.  
CC      The method comprises: (a) treating the sample with a chain terminating  
CC      reagent to prevent polynucleotide chain growth from the nucleic acid in  
CC      the sample; (b) contacting the sample with the probe containing a  
CC      terminus capable of elongation by a chain extending enzyme, where the  
CC      probe hybridises to the nucleic acid in the sample; (c) contacting the  
CC      sample with a chain extending enzyme and its substrates, which elongates  
CC      the probe; and (d) detecting the elongated hybridised probe. Also  
CC      described is a method comprising: (a) treating nucleic acid molecules or  
CC      modified nucleic acids in a sample with a reagent or reagents that render  
CC      the nucleic acid chains unextendable by a non-template-dependent enzyme;  
CC      (b) hybridising the treated molecules with a nucleic acid probe that  
CC      includes an extendable terminus, under conditions where hybrids form; and  
CC      (c) treating any hybrids formed with a non-template dependent chain  
CC      elongating enzyme and its substrates, where any hybridised probe is  
CC      extended. The method is useful for identifying and detecting nucleic  
CC      acids, particularly DNA hybridisation probes. The present sequence  
CC      represents a tailing reaction exemplary primer, which is used in an  
CC      example from the present invention  
XX  
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;  
SQ  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY      1520 AAAAAAAAAAGTAAA 1537  
DB      19 AAAAAAAAAAAAAAAAAA 2  
RESULT 538  
ABLS1521  
ID      ABL51521 standard; DNA; 19 BP.  
XX  
XX      ABL51521;  
XX
```

DT	01-JUL-2002	(first entry)
DE	Tailing reaction related exemplary primer dA18U SEQ ID NO:2.	
XX		
XX	Tailing reaction; tailed primer; primer; probe; identification;	
KW	detection; linear amplification scheme; chain extending enzyme;	
KW	telomerase; ss.	
XX		
OS	Synthetic.	
XX		
FT	Key	Location/Qualifiers
FT	misc_RNA	19
XX	/*tag= a	
XX		
FN	US2002031776-A1.	
PD		
XX	14-MAR-2002.	
PF		
XX	26-JUL-2001; 2001US-00917138.	
PR		
XX	28-MAY-1999; 99US-0136545P.	
PR	25-MAY-2000; 2000US-00580358.	
XX		
PA	(TULLIS R H.	
XX	(STREIF) STREIFEL J A.	
PI		
XX	Tullis RH, Streifel JA;	
DR		
XX	WPI; 2002-361176/39.	
FT		
PT	Identifying and detecting nucleic acids, particularly DNA hybridization	
PT	probes. Involves employing chain extending enzymes (e.g. telomerase) to	
PT	elongate probes to render them readily detectable.	
XX		
PS	Example 1; Page 5; 10pp; English.	
XX		
CC	The present invention describes a method for detecting a nucleic acid	
CC	probe, which comprises using chain extending enzymes to elongate probes.	
CC	The method comprises: (a) treating the sample with a chain terminating	
CC	reagent to prevent polynucleotide chain growth from the nucleic acid in	
CC	the sample; (b) contacting the sample with the probe containing a	
CC	terminus capable of elongation by a chain extending enzyme, where the	
CC	probe hybridizes to the nucleic acid in the sample; (c) contacting the	
CC	sample with a chain extending enzyme and its substrates, which elongates	
CC	the probe; and (d) detecting the elongated hybridized probe. Also	
CC	described is a method comprising: (a) treating nucleic acid molecules or	
CC	modified nucleic acids in a sample with a reagent or reagents that render	
CC	the nucleic acid chains unextendable by a non-template-dependent enzyme;	
CC	(b) hybridizing the treated molecules with a nucleic acid probe that	
CC	includes an extendable terminus, under conditions where hybrids form; and	
CC	(c) treating any hybrids formed with a non-template dependent chain	
CC	elongating enzyme and its substrates, where any hybridized probe is	
CC	extended. The method is useful for identifying and detecting nucleic	
CC	acids, particularly DNA hybridisation probes. The present sequence	
CC	represents a tailing reaction exemplary primer, which is used in an	
XX	example from the present invention	
XX		
SO	Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 1 U; 0 Other;	
XX		
Query Match	1.1%	Score 14.8; DB 1; Length 19;
Best Local Similarity	88.9%;	Pred. No. 4.6e+02;
Matches 16; Conservative	0;	Mismatches 2; Indels 0; Gaps 0;
OY	1520	AAAAAAAAAGTAAA 1537
DB	1	AAAAAAAAAAAAAAAAAA 18
RESULT 539		
AAD42000/C		
ID	AAD42000 standard; DNA; 19 BP.	
XX		
CC	AAD42000;	

[illegible]

```
XX Key Location/Qualifiers
FH modified_base 16..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "5-methyl, 2'-methoxyethyl residues"
XX
XX US6403779-B1.
PN
XX
XX 11-JUN-2002.
PD
XX
XX 08-JAN-1999; 99US-00227782.
PF
XX
XX 08-JAN-1999; 99US-00227782.
PR
XX
XX 08-JAN-1999; 99US-00227782.
PA
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
PI WPI; 2002-546338/58.
XX
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
XX
XX Example 46; Col 33; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleotides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2
RESULT 541
AAd42004/c
ID AAd42004 standard; DNA; 19 BP.
XX
XX AAd42004;
AC
XX
XX 04-NOV-2002 (first entry)
DT
XX
XX Oligonucleotide #7 used to illustrate the method of the invention.
DE
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX unidentified.
OS
XX
XX Key Location/Qualifiers
FH modified_base 18
FT /*tag= a
FT /mod_base= OTHER
FT /note= "5-methyl, 2'-dimethylaminoxyethyl residue"
XX
XX US6403779-B1.
PN
XX
```

```
PD 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
PF
XX
XX 08-JAN-1999; 99US-00227782.
PR
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
PI WPI; 2002-546338/58.
XX
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
XX
XX Example 46; Col 33; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleotides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2
RESULT 542
AAd42010/c
ID AAd42010 standard; DNA; 19 BP.
XX
XX AAd42010;
AC
XX
XX 04-NOV-2002 (first entry)
DT
XX
XX Oligonucleotide #13 used to illustrate the method of the invention.
DE
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX unidentified.
OS
XX
XX Key Location/Qualifiers
FH modified_base 16..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-dimethylaminoxyethyl thymidine (T-2'DMAOE)"
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
XX
XX US6403779-B1.
PN
XX
XX 11-JUN-2002.
PD
XX
XX 08-JAN-1999; 99US-00227782.
PF
XX
XX 08-JAN-1999; 99US-00227782.
PR
```



```
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX
PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
DR WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
XX
XX Example 46; Col 35; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2',3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleosides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 543
AAD42020/C
ID AAD42020 standard; DNA; 19 BP.
XX
XX AAD42020;
AC
XX
XX 04-NOV-2002 (first entry)
DT
XX
XX Oligonucleotide #23 used to illustrate the method of the invention.
DE
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
OS
XX
XX Key Location/Qualifiers
FH modified_base 15..18
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methylaminooxyethyl thymidine"
XX
XX US6403779-B1.
PN
XX
XX 11-JUN-2002.
PD
XX
XX 08-JAN-1999; 99US-00227782.
PP
XX 08-JAN-1999; 99US-00227782.
PR
XX 08-JAN-1999; 99US-00227782.
PA (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
PI
XX WPI; 2002-546338/58.
DR
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving
```

```
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
XX
XX Example 46; Col 41; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2',3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleosides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 544
AAD42001/C
ID AAD42001 standard; DNA; 19 BP.
XX
XX AAD42001;
AC
XX
XX 04-NOV-2002 (first entry)
DT
XX
XX Oligonucleotide #4 used to illustrate the method of the invention.
DE
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
OS
XX
XX Key Location/Qualifiers
FH modified_base 16..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "5-methyl, 2'-dimethylaminooxyethyl residues"
XX
XX US6403779-B1.
PN
XX
XX 11-JUN-2002.
PD
XX
XX 08-JAN-1999; 99US-00227782.
PP
XX 08-JAN-1999; 99US-00227782.
PR
XX 08-JAN-1999; 99US-00227782.
PA (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
PI
XX WPI; 2002-546338/58.
DR
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
XX
XX Example 46; Col 31; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2',3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
```

```
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleosides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1520 AAAAAAAAAAGTAAAA 1537
Db 19 AAAAAAAAAAAAAAAAAA 2

RESULT 545
AAD42011/c
ID AAD42011 standard; DNA; 19 BP.
XX
AC AAD42011;
XX
DT 04-NOV-2002 (first entry)
XX
DE Oligonucleotide #14 used to illustrate the method of the invention.
XX
KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 16..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-dimethylaminoxyethyl thymidine (T'-2' DMAOE) "
XX
PN US6403779-B1.
XX
PD 11-JUN-2002.
XX
PF 08-JAN-1999; 99US-00227782.
XX
PR 08-JAN-1999; 99US-00227782.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX
DR WPI; 2002-546338/58.
XX
PT Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
XX
PS Example 46; Col 37; 24pp; English.
XX
CC The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleosides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
```

```
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1520 AAAAAAAAAAGTAAAA 1537
Db 19 AAAAAAAAAAAAAAAAAA 2

RESULT 546
AAD42005/c
ID AAD42005 standard; DNA; 19 BP.
XX
AC AAD42005;
XX
DT 04-NOV-2002 (first entry)
XX
DE Oligonucleotide #8 used to illustrate the method of the invention.
XX
KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 18
FT /*tag= a
FT /mod_base= OTHER
FT /note= "5-methyl, 2'-methoxyethyl residues"
XX
PN US6403779-B1.
XX
PD 11-JUN-2002.
XX
PF 08-JAN-1999; 99US-00227782.
XX
PR 08-JAN-1999; 99US-00227782.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX
DR WPI; 2002-546338/58.
XX
PT Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
XX
PS Example 46; Col 33; 24pp; English.
XX
CC The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleosides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1520 AAAAAAAAAAGTAAAA 1537
Db 19 AAAAAAAAAAAAAAAAAA 2
```

```
RESULT 547
AADD42003/C
ID AAD42003 standard; DNA; 19 BP.
XX
AC AAD42003;
XX
DT 04-NOV-2002 (first entry)
XX
DE Oligonucleotide #6 used to illustrate the method of the invention.
XX
KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 16..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "5-methyl, 2'-O-propyl residues"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2'-O-alkylated compounds comprises dissolving
XX nucleoside in aprotic solvent, cooling, treating with base, warming,
XX cooling and reacting with ester.
XX
XX Example 46; Col 33; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
XX of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
XX The method involves dissolving the nucleoside in at least one aprotic
XX solvent, cooling, treating with base, warming, cooling and reacting with
XX a reactive ester. The method is useful for the preparation of 2'-O-alkyl
XX nucleosides, nucleosides and nucleoside surrogates used for preparation
XX of oligomeric compounds having improved hybridisation affinity and
XX nuclear resistance, which are useful as therapeutics, diagnostics and
XX research reagents. The present sequence is a modified oligonucleotide
XX used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. NO. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 19 AAAAAAAAAAAAAAAAAA 2
XX
XX RESULT 548
XX AADD41998/C
XX ID AAD41998 standard; DNA; 19 BP.
XX
XX AAD41998;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #1 used to illustrate the method of the invention.
XX
```

```
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 15..18
XX /*tag= a
XX /mod_base= OTHER
XX /note= "5-methyl, 2'-aminoxyethoxy (2'-NOE) residues"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2'-O-alkylated compounds comprises dissolving
XX nucleoside in aprotic solvent, cooling, treating with base, warming,
XX cooling and reacting with ester.
XX
XX Example 46; Col 31; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
XX of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
XX The method involves dissolving the nucleoside in at least one aprotic
XX solvent, cooling, treating with base, warming, cooling and reacting with
XX a reactive ester. The method is useful for the preparation of 2'-O-alkyl
XX nucleosides, nucleosides and nucleoside surrogates used for preparation
XX of oligomeric compounds having improved hybridisation affinity and
XX nuclear resistance, which are useful as therapeutics, diagnostics and
XX research reagents. The present sequence is a modified oligonucleotide
XX used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. NO. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 19 AAAAAAAAAAAAAAAAAA 2
XX
XX RESULT 549
XX AADD41999/C
XX ID AAD41999 standard; DNA; 19 BP.
XX
XX AAD41999;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #2 used to illustrate the method of the invention.
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 15..18
XX /*tag= a
XX
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FT /mod_base= OTHER
FT /note= "5-methyl, 2'-dimethylaminoxyethoxy (2'-DMAOE)
FT residues"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2',-O-alkylated compounds comprises dissolving
XX nucleoside in aprotic solvent, cooling, treating with base, warming,
XX cooling and reacting with ester.
XX
XX Example 46; Col 31, 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
XX of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
XX The method involves dissolving the nucleoside in at least one aprotic
XX solvent, cooling, treating with base, warming, cooling and reacting with
XX a reactive ester. The method is useful for the preparation of 2'-O-alkyl
XX nucleotides, nucleosides and nucleoside surrogates used for preparation
XX of oligomeric compounds having improved hybridisation affinity and
XX nuclear resistance, which are useful as therapeutics, diagnostics and
XX research reagents. The present sequence is a modified oligonucleotide
XX used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAGTAAAA 1537
XX |||||||
XX 19 AAAAAAAAAAAAAAAAAA 2
XX
XX RESULT 550
XX AAD42009/c
XX ID AAD42009 standard; DNA; 19 BP.
XX
XX AAD42009;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #12 used to illustrate the method of the invention.
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 15..18
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-dimethylaminoxyethyl thymidine (T-2'-DMAOE)"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
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```
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2',-O-alkylated compounds comprises dissolving
XX nucleoside in aprotic solvent, cooling, treating with base, warming,
XX cooling and reacting with ester.
XX
XX Example 46; Col 35; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
XX of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
XX The method involves dissolving the nucleoside in at least one aprotic
XX solvent, cooling, treating with base, warming, cooling and reacting with
XX a reactive ester. The method is useful for the preparation of 2'-O-alkyl
XX nucleotides, nucleosides and nucleoside surrogates used for preparation
XX of oligomeric compounds having improved hybridisation affinity and
XX nuclear resistance, which are useful as therapeutics, diagnostics and
XX research reagents. The present sequence is a modified oligonucleotide
XX used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAGTAAAA 1537
XX |||||||
XX 19 AAAAAAAAAAAAAAAAAA 2
XX
XX Db
XX
XX RESULT 551
XX ABZ75398/c
XX ID ABZ75398 standard; DNA; 19 BP.
XX
XX ABZ75398;
XX
XX 07-MAY-2003 (first entry)
XX
XX Synthetic nuclease-resistant oligomeric compound #54.
XX
XX Nuclease resistant; ds; pharmaceutical; topical administration;
XX transdermal patch; enzymatic degradation resistant.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 19
XX /*tag= a
XX /mod_base= OTHER
XX /note= "phenoxazine"
XX
XX WO2003004602-A2.
XX
XX 16-JAN-2003.
XX
XX 01-JUL-2002; 2002WO-US020934.
XX
XX 03-JUL-2001; 2001US-0302682P.
XX
XX 28-NOV-2001; 2001US-00996292.
XX
XX 10-DEC-2001; 2001US-00013295.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Maier MA, Prakash TP, Rajeev KG;
XX
```

DR WPI; 2003-256318/25.  
XX Nuclease-resistant oligomeric compound useful as pharmaceuticals for  
PT topical administration such as transdermal patches.  
XX  
XX Disclosure; Page 234; 234pp; English.  
XX  
XX The invention relates to novel nuclease-resistant oligomeric compounds.  
CC The compounds of the invention are useful as pharmaceuticals for topical  
CC administration such as transdermal patches. The oligomeric compound is  
CC resistant to enzymatic degradation. The sequences shown in AB275345-  
CC AB275399 represent the nuclease-resistant compounds of the invention  
XX  
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;  
SQ  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 1520 AAAAAAAAAAGTAAA 1537  
Db 18 AAAAAAAAAAAAAAAAAA 1  
RESULT 552  
AB275399/C  
ID AB275399 standard; DNA; 19 BP.  
XX  
XX AB275399;  
AC  
XX  
XX 07-MAY-2003 (first entry)  
DT  
XX  
XX Synthetic nuclease-resistant oligomeric compound #55.  
DE  
XX Nuclease resistant; ds; pharmaceutical; topical administration;  
KW transdermal patch; enzymatic degradation resistant.  
KM  
XX  
XX Synthetic.  
OS  
XX  
XX Key Location/Qualifiers  
FH modified\_base 19  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "G-clamp modification"  
XX  
XX WO2003004602-A2.  
FN  
XX  
XX 16-JAN-2003.  
PD  
XX  
XX 01-JUL-2002; 2002WO-US020934.  
PF  
XX  
XX 03-JUL-2001; 2001US-0302682P.  
PR  
XX 28-NOV-2001; 2001US-00996292.  
PR  
XX 10-DEC-2001; 2001US-00013295.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Manoharan M, Maier MA, Prakash TP, Rajeev KG;  
PI  
XX WPI; 2003-256318/25.  
DR  
XX  
XX Nuclease-resistant oligomeric compound useful as pharmaceuticals for  
PT topical administration such as transdermal patches.  
PT  
XX  
XX Disclosure; Page 234; 234pp; English.  
XX  
XX The invention relates to novel nuclease-resistant oligomeric compounds.  
CC The compounds of the invention are useful as pharmaceuticals for topical  
CC administration such as transdermal patches. The oligomeric compound is  
CC resistant to enzymatic degradation. The sequences shown in AB275345-  
CC AB275399 represent the nuclease-resistant compounds of the invention  
XX  
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 1520 AAAAAAAAAAGTAAA 1537  
Db 18 AAAAAAAAAAAAAAAAAA 1  
RESULT 553  
AB258336/C  
ID AB258336 standard; DNA; 19 BP.  
XX  
XX AB258336;  
AC  
XX  
XX 28-APR-2003 (first entry)  
DT  
XX  
XX Oligonucleotide with 2'-O-(2-(methylthio)ethyl)-5-methyluridine.  
DE  
XX  
XX Oligonucleotide; 2'-O-(2-(methylthio)ethyl)-5-methyluridine; antisense;  
KW DNA-RNA hybrid; ss.  
KM  
XX  
XX Synthetic.  
OS  
XX  
XX Key Location/Qualifiers  
FH modified\_base 16  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"  
FT modified\_base 17  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"  
FT modified\_base 18  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"  
FT modified\_base 19  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"  
XX  
XX WO2003004603-A2.  
FN  
XX  
XX 16-JAN-2003.  
PD  
XX  
XX 01-JUL-2002; 2002WO-US020940.  
PF  
XX  
XX 03-JUL-2001; 2001US-0302683P.  
PR  
XX 28-JAN-2002; 2002US-00058740.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Prakash TP, Manoharan M;  
PI  
XX WPI; 2003-239204/23.  
DR  
XX  
XX Increasing binding of oligomeric compound to proteins useful in  
PT preparation of antisense therapeutics, involves use of modified  
PT oligomeric compound having oligonucleotide group.  
PT  
XX  
XX Example 27; Page 72; 122pp; English.  
XX  
XX The present sequence is an example of an oligonucleotide of the invention  
CC containing 2'-O-(2-(methylthio)ethyl)-5-methyluridine (2'-O-(MTE)-5-  
CC methyluridine) modifications. In examples of the invention, 2'-O-MTE was  
CC incorporated into oligonucleotides and evaluated for antisense properties  
CC in comparison with the known 2'-O-(2-methoxyethyl) (2'-O-MOE)  
CC modification. The 2'-O-MTE modified oligonucleotides exhibited similar  
CC binding affinity to target RNA as their 2'-O-MOE equivalent while binding  
CC to human serum albumin was improved. The modification can be used to  
CC modulate the pharmacokinetics of oligonucleotides, e.g. in antisense

```
CC therapy
XX Sequence 19 BP; 0 A; 0 C; 0 G; 15 T; 4 U; 0 Other;
SQ Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAAA 1537
Db 19 AAAAAAAAAAAAAAAAAA 2

RESULT 554
ADF35957/C
ID ADF35957 standard; RNA; 19 BP.
AC ADF35957;
XX
XX 12-FEB-2004 (first entry)
XX
XX Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:246.
XX
XX double-stranded short interfering nucleic acid;
KM short interfering nucleic acid; siNA; downregulation;
KM vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KM cyostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KM nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KM diabetic retinopathy; macular degeneration; neovascular glaucoma;
KM arthritis; psoriasis; endometriosis; angiodiroma;
KM polycystic kidney disease; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO2003070910-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005022.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 29-MAY-2002; 2002WO-US017674.
XX 06-JUN-2002; 2002US-0386782P.
XX 03-JUL-2002; 2002US-0393796P.
XX 29-JUL-2002; 2002US-0399348P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 04-NOV-2002; 2002US-00287949.
XX 27-NOV-2002; 2002US-00306747.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcawiggen J, Beigelman L, Pavco P;
XX WPI; 2003-679876/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
XX Example 3; SEQ ID NO 246; 207pp; English.
XX
XX The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) Vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cyostatic, antidiabetic,
```

```
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiodiroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
SQ Sequence 19 BP; 3 A; 3 C; 1 G; 0 T; 12 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1513 GTTAATTAAAAAAAAA 1530
Db 19 GTTAGTCAAAAAAAAA 2

RESULT 555
ADF36384
ID ADF36384 standard; RNA; 19 BP.
XX
XX ADF36384;
AC
XX
XX 12-FEB-2004 (first entry)
XX
XX Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:673.
XX
XX double-stranded short interfering nucleic acid;
KM short interfering nucleic acid; siNA; downregulation;
KM vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KM cyostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KM nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KM diabetic retinopathy; macular degeneration; neovascular glaucoma;
KM arthritis; psoriasis; endometriosis; angiodiroma;
KM polycystic kidney disease; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO2003070910-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005022.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 29-MAY-2002; 2002WO-US017674.
XX 06-JUN-2002; 2002US-0386782P.
XX 03-JUL-2002; 2002US-0393796P.
XX 29-JUL-2002; 2002US-0399348P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 04-NOV-2002; 2002US-00287949.
XX 27-NOV-2002; 2002US-00306747.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcawiggen J, Beigelman L, Pavco P;
XX WPI; 2003-679876/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
```

XX Example 3; SEQ ID NO 673; 207pp; English.  
PS  
XX  
CC The present invention describes a double-stranded short interfering  
CC nucleic acid (siNA) that downregulates expression of the vascular  
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a  
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo  
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors  
CC that express siNA; and (5) single-stranded siNA with similar properties.  
CC The siNAs have antiangiogenic, cytostatic, antidiabetic, nephrotropic and  
CC ophtalmological activities. The siNA are useful for modulating  
CC (downregulating) the expression of VEGFR genes. The siNA are potentially  
CC useful for treating a wide range of angiogenesis-associated conditions,  
CC particularly cancers, diabetic retinopathy, macular degeneration,  
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiodiroma,  
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,  
CC drug screening, target identification and validation, genetic  
CC engineering, studying gene function, and also for gene mapping (e.g. of  
CC single-nucleotide polymorphisms). The present sequence is used in the  
CC exemplification of the present invention.  
XX  
SQ Sequence 19 BP; 12 A; 1 C; 3 G; 0 T; 3 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 72.2%; Pred. No. 4.6e+02;  
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;  
QY 1513 GTTAATTAAAAAAA 1530  
DB 1 GUVAGUCAAAAAAA 18  
RESULT 556  
ADE9245/C  
ID ADE9245 standard; DNA; 19 BP.  
XX  
AC ADE9245;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE Modified oligomeric compound #5.  
XX  
KW Oligomeric compound; hepatitis C virus; 2'-O-modification;  
KW nuclease resistance; hepatotropic; virucide; antiinflammatory; ss.  
XX  
OS Synthetic.  
XX  
PN US660032-B1.  
XX  
PD 29-JUL-2003.  
XX  
PE 06-AUG-1999; 99US-00370625.  
XX  
PR 07-AUG-1998; 98US-00130566.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Manoharan M, Cook PD;  
XX  
DR WPI; 2003-895259/82.  
XX  
PT New oligomeric compound having at least one nucleoside useful for  
PT therapeutic and investigative purposes e.g. for treating hepatitis C  
PT virus infection.  
XX  
PS Disclosure; SEQ ID NO 5; 26pp; English.  
XX  
CC The invention relates to oligomeric compounds having at least one  
CC nucleoside. The compounds are useful for therapeutic and investigative  
CC purposes and for treating hepatitis C virus infection. The compounds  
CC having 2'-O-modifications increases their affinity and nuclease  
CC resistance. This sequence represents an oligomeric compound of the  
CC invention.

CC invention.  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAGTAAAA 1537  
DB 19 AAAAAAAAGTAAAA 2  
RESULT 557  
ADE9265/C  
ID ADE9265 standard; DNA; 19 BP.  
XX  
AC ADE9265;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE Modified oligomeric compound #26.  
XX  
KW Oligomeric compound; hepatitis C virus; 2'-O-modification;  
KW nuclease resistance; hepatotropic; virucide; antiinflammatory; ss.  
XX  
OS Synthetic.  
XX  
PN US660032-B1.  
XX  
PD 29-JUL-2003.  
XX  
PE 06-AUG-1999; 99US-00370625.  
XX  
PR 07-AUG-1998; 98US-00130566.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Manoharan M, Cook PD;  
XX  
DR WPI; 2003-895259/82.  
XX  
PT New oligomeric compound having at least one nucleoside useful for  
PT therapeutic and investigative purposes e.g. for treating hepatitis C  
PT virus infection.  
XX  
PS Disclosure; SEQ ID NO 26; 26pp; English.  
XX  
CC The invention relates to oligomeric compounds having at least one  
CC nucleoside. The compounds are useful for therapeutic and investigative  
CC purposes and for treating hepatitis C virus infection. The compounds  
CC having 2'-O-modifications increases their affinity and nuclease  
CC resistance. This sequence represents an oligomeric compound of the  
CC invention.  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAGTAAAA 1537  
DB 19 AAAAAAAAGTAAAA 2  
RESULT 558  
ADF83976/C  
ID ADF83976 standard; RNA; 19 BP.  
XX  
AC ADF83976;  
XX  
DT 26-FEB-2004 (first entry)

```
XX Human breakpoint cluster region-targeted siRNA - SEQ ID 270.
DE
XX short interfering nucleic acid; siRNA; breakpoint cluster region;
KM v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KM cytosolic; leukaemia; lymphoma; human; BCR; ss; siRNA.
OS Homo sapiens.
XX
XX WO2003070972-A2.
PN
XX
XX
XX 28-AUG-2003.
PD
XX
XX 20-FEB-2003; 2003WO-US005234.
PF
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 15-AUG-2002; 2002US-0404039P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 14-JAN-2003; 2003US-0439922P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Mcswiggen J, Beigelman L, Chowrira B;
PI
XX WPI; 2003-679889/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint
PT cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 270; 197bp; English.
XX
XX The invention relates to a novel double-stranded short interfering
CC nucleic acid (siRNA) that downregulates expression of the breakpoint
CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC activity and may be useful for modulating expression of the BCR-ABL gene,
CC as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC screening, target identification and validation, genetic engineering,
CC gene function studies and gene mapping. The current sequence is that of
CC the human BCR-targeted siRNA of the invention.
XX
XX Sequence 19 BP; 0 A; 12 C; 6 G; 0 T; 1 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 427 GCGGCTGCGGCGCGCGCG 444
Db 19 GCGGCGAGCGCGCGCGCG 2
RESULT 559
ADF83713
ID ADF83713 standard; RNA; 19 BP.
XX
XX ADF83713;
AC
XX
XX 26-FEB-2004 (first entry)
DT
XX
XX Human breakpoint cluster region-targeted siRNA - SEQ ID 7.
DE
XX short interfering nucleic acid; siRNA; breakpoint cluster region;
KM v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KM cytosolic; leukaemia; lymphoma; human; BCR; ss; siRNA.
XX
XX Homo sapiens.
OS
```

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XX
XX WO2003070972-A2.
PN
XX
XX 28-AUG-2003.
PD
XX
XX 20-FEB-2003; 2003WO-US005234.
PF
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 15-AUG-2002; 2002US-0404039P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 14-JAN-2003; 2003US-0439922P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Mcswiggen J, Beigelman L, Chowrira B;
PI
XX WPI; 2003-679889/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint
PT cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 7; 197bp; English.
XX
XX The invention relates to a novel double-stranded short interfering
CC nucleic acid (siRNA) that downregulates expression of the breakpoint
CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC activity and may be useful for modulating expression of the BCR-ABL gene,
CC as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC screening, target identification and validation, genetic engineering,
CC gene function studies and gene mapping. The current sequence is that of
CC the human BCR-targeted siRNA of the invention.
XX
XX Sequence 19 BP; 1 A; 6 C; 12 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 427 GCGGCTGCGGCGCGCGCG 444
Db 1 GCGGCGAGCGCGCGCGCG 18
RESULT 560
ADG85220/c
ID ADG85220 standard; DNA; 19 BP.
XX
XX ADG85220;
AC
XX
XX 11-MAR-2004 (first entry)
DT
XX
XX Oligo dT primer to amplify cytochrome P450 gene fragments.
DE
XX cytochrome P450 gene; tobacco; phenocype; transgenic plant; nornicotine;
KM primer; ss.
XX
XX Nicotiana sp.
OS
XX
XX WO2003078577-A2.
PN
XX
XX 25-SEP-2003.
PD
XX
XX 12-MAR-2003; 2003WO-US007430.
PF
XX
XX 12-MAR-2002; 2002US-0363684P.
XX
```



PA (USSM-) US SMOKELESS TOBACCO CO.  
XX Xu D;  
XX WPI; 2003-902814/82.  
XX  
XX New isolated nucleic acid molecule comprising a fragment of cytochrome  
PT P450, useful for altering plant phenotypes, and for producing transgenic  
PT plants containing high normicotine levels.  
XX  
XX Disclosure; SEQ ID NO 154; 81pp; English.  
XX  
XX The invention relates to the isolation of nucleic acid molecules  
CC comprising fragments of a cytochrome P450 gene from Nicotiana plants or  
CC molecule that have at least 75, 91 or 99% identity to the sequences. The  
CC nucleic acid molecules are useful for altering plant phenotypes, and for  
CC producing transgenic plants containing high normicotine levels. This  
CC sequence represents a PCR primer used to isolate the fragments of the  
CC genes of the invention.  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 18 AAAAAAAAAAAAAAAAAA 1  
RESULT 561  
ADH97218/C  
ID ADH97218 standard; DNA; 19 BP.  
XX  
XX ADH97218;  
XX  
XX 15-APR-2004 (first entry)  
XX  
XX Synthetically modified nuclease resistant oligomer #7.  
XX  
XX Nuclease resistance; hybrid binding; antisense technology; ss.  
XX  
XX Synthetic.  
XX  
XX Key Location/Qualifiers  
FT modified\_base 19  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"  
XX  
XX US6534639-B1.  
XX  
XX 18-MAR-2003.  
XX  
XX 07-JUL-2000; 2000US-00612531.  
XX  
XX 07-JUL-1999; 99US-00349040.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Manoharan M, Cook PD, Prakash TP, Mohan V;  
XX WPI; 2003-644179/61.  
XX  
XX Guanidinium functionalized oligonucleotides used for diagnostic,  
PT therapeutic or investigative purposes comprises a number of nucleotide  
PT units.  
XX  
XX Example 26; SEQ ID NO 7; 51pp; English.  
XX  
XX This invention relates to novel synthetically modified oligomers that  
CC have increased nuclease resistance and have enhanced hybrid binding. Such  
CC oligomers are useful for diagnostic and therapeutic uses such as  
CC antisense technologies. The invention also discloses a method for the  
CC preparation of the oligomers with modifications as fully defined in the  
CC specification. The present sequence represents a synthetically modified  
CC oligonucleotide of the invention.  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

CC oligomers are useful for diagnostic and therapeutic uses such as  
CC antisense technologies. The invention also discloses a method for the  
CC preparation of the oligomers with modifications as fully defined in the  
CC specification. The present sequence represents a synthetically modified  
CC oligonucleotide of the invention.  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 19 AAAAAAAAAAAAAAAAAA 2  
RESULT 562  
ADH97214/C  
ID ADH97214 standard; DNA; 19 BP.  
XX  
XX ADH97214;  
XX  
XX 15-APR-2004 (first entry)  
XX  
XX Synthetically modified nuclease resistant oligomer #3.  
XX  
XX Nuclease resistance; hybrid binding; antisense technology; ss.  
XX  
XX Synthetic.  
XX  
XX Key Location/Qualifiers  
FT modified\_base 16.19  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"  
XX  
XX US6534639-B1.  
XX  
XX 18-MAR-2003.  
XX  
XX 07-JUL-2000; 2000US-00612531.  
XX  
XX 07-JUL-1999; 99US-00349040.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Manoharan M, Cook PD, Prakash TP, Mohan V;  
XX WPI; 2003-644179/61.  
XX  
XX Guanidinium functionalized oligonucleotides used for diagnostic,  
PT therapeutic or investigative purposes comprises a number of nucleotide  
PT units.  
XX  
XX Example 26; SEQ ID NO 3; 51pp; English.  
XX  
XX This invention relates to novel synthetically modified oligomers that  
CC have increased nuclease resistance and have enhanced hybrid binding. Such  
CC oligomers are useful for diagnostic and therapeutic uses such as  
CC antisense technologies. The invention also discloses a method for the  
CC preparation of the oligomers with modifications as fully defined in the  
CC specification. The present sequence represents a synthetically modified  
CC oligonucleotide of the invention.  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 18 AAAAAAAAAAAAAAAAAA 1

```
Db      19 AAAAAAAAAAAAAA 2
XX
XX      RESULT 563
XX      ADH97224/c
XX      ID      ADH97224 standard; DNA; 19 BP.
XX
XX      ADH97224;
XX
XX      15-APR-2004 (first entry)
XX
XX      Synthetically modified nuclease resistant oligomer #13.
XX
XX      Nuclease resistance; hybrid binding; antisense technology; ss.
XX
XX      Synthetic.
XX
XX      Key      Location/Qualifiers
XX      modified_base      17
XX      /*tag= a
XX      /mod_base= OTHER
XX      /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
XX      modified_base      19
XX      /*tag= b
XX      /mod_base= OTHER
XX      /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
XX      US6534639-B1.
XX
XX      18-MAR-2003.
XX
XX      07-JUL-2000; 2000US-00612531.
XX
XX      07-JUL-1999; 99US-00349040.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX      WPI; 2003-644179/61.
XX
XX      Guanidinium functionalized oligonucleotides used for diagnostic,
XX      therapeutic or investigative purposes comprises a number of nucleotide
XX      units.
XX
XX      Example 26; SEQ ID NO 13; 51bp; English.
XX
XX      This invention relates to novel synthetically modified oligomers that
XX      have increased nuclease resistance and have enhanced hybrid binding. Such
XX      oligomers are useful for diagnostic and therapeutic uses such as
XX      antisense technologies. The invention also discloses a method for the
XX      preparation of the oligomers with modifications as fully defined in the
XX      specification. The present sequence represents a synthetically modified
XX      oligonucleotide of the invention.
XX
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX      Query Match      1.1%; Score 14.8; DB 1; Length 19;
XX      Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX      Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX      1520 AAAAAAAAAAGTAAAA 1537
XX      19 AAAAAAAAAAAAAA 2
XX
XX      RESULT 564
XX      ADJ81917
XX      ID      ADJ81917 standard; DNA; 19 BP.
XX
XX      AC      ADJ81917;
XX
XX      DT      06-MAY-2004 (first entry)
```

```
XX
XX      Mouse Na+-dependent bile acid transporter gene primer m230TR.
XX
XX      ss; primer; antilipemic; antiarteriosclerosis; gynecological; anabolic;
XX      nephrotropic; antiasthmatic; antiinflammatory; vasotropic; antirheumatic;
XX      immunosuppressive; antidiabetic; neuroprotective; neuroprotective;
XX      cyostatic; antianginal; cardiant; vanilloid receptor; P-type.
XX
XX      Mus sp.
XX
XX      WO2003062274-A1.
XX
XX      31-JUL-2003.
XX
XX      16-JAN-2003; 2003WO-JP000311.
XX
XX      18-JAN-2002; 2002JP-00010840.
XX      24-JAN-2002; 2002JP-00015995.
XX      01-FEB-2002; 2002JP-00025662.
XX      01-FEB-2002; 2002JP-00025706.
XX      06-FEB-2002; 2002JP-00030015.
XX      08-FEB-2002; 2002JP-00033111.
XX      21-FEB-2002; 2002JP-00045058.
XX      22-FEB-2002; 2002JP-00046951.
XX
XX      (TAKE ) TAKEDA CHEM IND LTD.
XX
XX      Uno Y, Hikichi Y, Sagiya Y, Nakanishi A;
XX
XX      WPI; 2003-636729/60.
XX
XX      Proteins TCH200, TCH212, TCH230 and TCH234 of human origin and DNA
XX      encoding them for treatment and prevention of a wide range of diseases
XX      including digestive, blood, respiratory and pancreatic disorders.
XX
XX      Example 14; SEQ ID NO 114; 341bp; Japanese.
XX
XX      The invention relates to novel proteins (I) of human origin including
XX      TCH200 (a vanilloid receptor protein), TCH212 (a P-type ATPase protein),
XX      TCH230 (a sodium-dependent bile acid transporter protein) and TCH234 (a
XX      Na + /H + exchange transporter protein) (and other proteins with similar
XX      activities), are new. he protein and encoding genes are useful for the
XX      prevention and treatment of a wide range of diseases including
XX      hyperlipemia, arteriosclerosis, diseases of the reproductive organs,
XX      diseases of the digestive system, nervous system diseases, kidney
XX      diseases, respiratory diseases, pancreas diseases, inflammatory
XX      disorders, rheumatism, cancer and diabetic neuropathy. Specific diseases
XX      mentioned include Crohn's disease, ulcerative colitis, benign prostate
XX      hypertrophy, prostatitis, hemorrhagic colitis, asthma, bronchitis,
XX      Sjogren's disease, multiple sclerosis, digestive system ulcer, hay
XX      fever, anaphylactic shock, atopic dermatitis, chronic rheumatoid
XX      arthritis, leukopenia, spleen hypofunction, diabetes, heart failure, QT
XX      disease, angina pectoris, pancreatitis, lupus erythematosus, and cancer
XX      of the testis, ovary, breast, esophagus, lung, kidney, liver, prostate,
XX      bladder, stomach and intestine. This sequence corresponds to a primer
XX      used to clone the sequences of the invention.
XX
XX      Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX      Query Match      1.1%; Score 14.8; DB 1; Length 19;
XX      Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX      Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX      1546 AGGATGTACCCAGAAATG 1563
XX      2 AGCATGCCACCCAGAAATG 19
XX
XX      RESULT 565
XX      ADJ66298/c
XX      ID      ADJ66298 standard; RNA; 19 BP.
XX
XX      AC      ADJ66298;
```

```
XX 06-MAY-2004 (first entry)
XX
XX Human TGFb-R siNA lower strand, SEQ ID NO:136.
DE
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; human;
XX antidiabetic; nephrotropic; hepatotropic; cytostatic;
XX transforming growth factor beta receptor; TGFb; TGFb-R;
XX diabetic nephropathy; chronic liver disease; pulmonary fibrosis; ss.
XX
XX Homo sapiens.
XX
XX MO2003070197-A2.
XX
XX 28-AUG-2003.
XX
XX 11-FEB-2003; 2003WO-US007273.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 12-NOV-2002; 2002US-0425559P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcwiggan J, Beigelman L;
XX
XX WPI; 2003-697557/66.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of diabetic nephropathy, which downregulates expression of the
XX transforming growth factor-beta receptor gene.
XX
XX Example 3; SEQ ID NO 136; 137pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the human transforming growth factor beta
XX (TGFb) receptor (TGFb-R) gene by RNA interference. The siNAs may or may
XX not comprise ribonucleotides and may be double or single stranded. They
XX further comprise sense and antisense regions, or alternatively are
XX assembled from a sense oligonucleotide and an antisense oligonucleotide.
XX Specifically, the siNAs include short interfering RNA (siRNA), double-
XX stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
XX can be unmodified or chemically modified, can contain
XX deoxyribonucleotides, and can be chemically synthesised, expressed from a
XX vector or enzymatically synthesised. The invention also relates to kits
XX for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
XX of siNA; and vectors that express siNA. The siNAs are used to modulate
XX expression of the TGFb-R gene in cells, tissue explants or organisms
XX (e.g., by ex vivo gene therapy), or in grafts and transplants for the
XX treatment of a variety of conditions. They may be used for treating
XX diabetic nephropathy, chronic liver disease or pulmonary fibrosis. The
XX siNAs are also useful for drug screening, diagnosis, therapeutic target
XX identification and validation, genetic engineering, pharmacogenomics,
XX studying gene function, and gene mapping (e.g., of single nucleotide
XX polymorphisms). The present sequence represents the lower strand of a
XX human TGFb-R-targeted double-stranded siNA.
XX
XX Sequence 19 BP; 0 A; 12 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Bect Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 426 GGCGGCTCGGCGCGGC 443
```

```
DB 18 GGCGGCGGCGCGCGGC 1
||||| ||||| |||
RESULT 566
ADJ66170
XX ID ADJ66170 standard; RNA; 19 BP.
XX
XX ADJ66170;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human TGFb-R transcript target sequence/siNA upper strand, SEQ ID NO:8.
XX
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; human;
XX antidiabetic; nephrotropic; hepatotropic; cytostatic;
XX transforming growth factor beta receptor; TGFb; TGFb-R;
XX diabetic nephropathy; chronic liver disease; pulmonary fibrosis;
XX target sequence; ss.
XX
XX Homo sapiens.
XX
XX MO2003070197-A2.
XX
XX 28-AUG-2003.
XX
XX 11-FEB-2003; 2003WO-US007273.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 12-NOV-2002; 2002US-0425559P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcwiggan J, Beigelman L;
XX
XX WPI; 2003-697557/66.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of diabetic nephropathy, which downregulates expression of the
XX transforming growth factor-beta receptor gene.
XX
XX Example 3; SEQ ID NO 8; 137pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the human transforming growth factor beta
XX (TGFb) receptor (TGFb-R) gene by RNA interference. The siNAs may or may
XX not comprise ribonucleotides and may be double or single stranded. They
XX further comprise sense and antisense regions, or alternatively are
XX assembled from a sense oligonucleotide and an antisense oligonucleotide.
XX Specifically, the siNAs include short interfering RNA (siRNA), double-
XX stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
XX can be unmodified or chemically modified, can contain
XX deoxyribonucleotides, and can be chemically synthesised, expressed from a
XX vector or enzymatically synthesised. The invention also relates to kits
XX for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
XX of siNA; and vectors that express siNA. The siNAs are used to modulate
XX expression of the TGFb-R gene in cells, tissue explants or organisms
XX (e.g., by ex vivo gene therapy), or in grafts and transplants for the
XX treatment of a variety of conditions. They may be used for treating
XX diabetic nephropathy, chronic liver disease or pulmonary fibrosis. The
XX siNAs are also useful for drug screening, diagnosis, therapeutic target
XX identification and validation, genetic engineering, pharmacogenomics,
XX studying gene function, and gene mapping (e.g., of single nucleotide
```

CC polymorphisms). The present sequence represents the upper strand of a  
CC human Tgfb-R-targeted double-stranded siNA, which is identical to the  
CC Tgfb-R transcript target sequence.  
XX  
SQ Sequence 19 BP; 0 A; 7 C; 12 G; 0 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 426 GGGCGGCTGCGCGCGCGC 443  
Db 2 GGGCGCGCGCGCGCGCGC 19  
RESULT 567  
ADL79087  
ID ADL79087 standard; RNA; 19 BP.  
XX  
AC ADL79087;  
XX  
DT 20-MAY-2004 (first entry)  
XX  
DE Human HER2 (EGFR2) siNA lower strand, SEQ ID NO:252.  
XX  
KM RNA interference; short interfering nucleic acid; siNA;  
KM short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KM short hairpin RNA; shRNA; expression modulation; gene therapy;  
KM drug screening; diagnosis; therapeutic target identification;  
KM pharmacogenomics; gene function analysis; gene mapping; cancer;  
KM cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;  
KM HER2; EGFR2; neu; erbB2; c-erb-B-2; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070912-A2.  
XX  
PD 28-AUG-2003.  
XX  
PF 20-FEB-2003; 2003WO-US005045.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 29-MAY-2002; 2002WO-US016840.  
PR 06-JUN-2002; 2002US-00163552.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 03-JUL-2002; 2002US-0393924P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 19-SEP-2002; 2002US-00251117.  
PR 21-OCT-2002; 2002US-00277494.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswigen J, Pavco P, Beigelman L, Fossnaugh K, Jamison S;  
XX  
DR WPI; 2003-697612/66.  
XX  
PT New short interfering nucleic acid, useful e.g. for treatment and  
XX  
PS factor receptor gene.  
XX  
PS Example 3; SEQ ID NO 252; 171pp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of one or more human epidermal growth factor  
CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short

CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of EGFR genes in cells, tissue explants or  
CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants  
CC for the treatment of a variety of conditions. They may be used for  
CC treating a wide range of cancers such as breast and ovarian cancer. The  
CC siNAs are also useful for drug screening, diagnosis, therapeutic target  
CC identification and validation, genetic engineering, pharmacogenomics,  
CC studying gene function, and gene mapping (e.g., of single nucleotide  
CC polymorphisms). The present sequence represents the lower strand of a  
CC HER2 (EGFR2)-targeted double-stranded siNA.  
XX  
SQ Sequence 19 BP; 1 A; 7 C; 10 G; 0 T; 1 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.6e+02;  
Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
OY 469 GGGCGCGCGGCTGACGG 486  
Db 2 GGGCGCGCGCGCGCGCCG 19  
RESULT 568  
ADL78838/C  
ID ADL78838 standard; RNA; 19 BP.  
XX  
AC ADL78838;  
XX  
DT 20-MAY-2004 (first entry)  
XX  
DE Human HER2 (EGFR2) transcript target sequence/siNA upper strand, SEQ.3.  
XX  
KM RNA interference; short interfering nucleic acid; siNA;  
KM short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KM short hairpin RNA; shRNA; expression modulation; gene therapy;  
KM drug screening; diagnosis; therapeutic target identification;  
KM pharmacogenomics; gene function analysis; gene mapping; cancer;  
KM cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;  
KM HER2; EGFR2; neu; erbB2; c-erb-B-2; target sequence; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070912-A2.  
XX  
PD 28-AUG-2003.  
XX  
PF 20-FEB-2003; 2003WO-US005045.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 29-MAY-2002; 2002WO-US016840.  
PR 06-JUN-2002; 2002US-00163552.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 03-JUL-2002; 2002US-0393924P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 19-SEP-2002; 2002US-00251117.  
PR 21-OCT-2002; 2002US-00277494.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswigen J, Pavco P, Beigelman L, Fossnaugh K, Jamison S;  
XX  
DR WPI; 2003-697612/66.  
XX  
PT New short interfering nucleic acid, useful e.g. for treatment and

PT diagnosis of cancer, downregulates expression of the epidermal growth  
PT factor receptor gene.  
PS Example 3; SEQ ID NO 3; 171bp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of one or more human epidermal growth factor  
CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of EGFR genes in cells, tissue explants or  
CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants  
CC for the treatment of a variety of conditions. They may be used for  
CC treating a wide range of cancers such as breast and ovarian cancer. The  
CC siNAs are also useful for drug screening, diagnosis, therapeutic target  
CC identification and validation, genetic engineering, pharmacogenomics,  
CC studying gene function, and gene mapping (e.g., of single nucleotide  
CC polymorphisms). The present sequence represents the upper strand of a  
CC human HER2 (EGFR)-targeted double-stranded siNA, which is identical to  
CC the HER2 transcript target sequence.  
XX  
SQ Sequence 19 BP; 1 A; 10 C; 7 G; 0 T; 1 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 469 GGGGCGCGCGGCTGACGG 486  
Db 18 GGGGCGCGCGGCTGCCG 1  
RESULT 569  
ABD24924  
ID ABD24924 standard; DNA; 19 BP.  
XX  
AC ABD24924;  
XX  
DT 29-JUN-2004 (first entry)  
XX  
DE A1095492-derived oligonucleotide SEQ ID 3936.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenoma sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiaesthetic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
OS  
XX  
PN WO200285309-A2.  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US031143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D,  
Miller S, Tang L, Shahbuddin S;

XX  
DR WPI, 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 3936; 763bp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiaesthetic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 19 BP; 16 A; 0 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1514 TTAATTAAAAA 1531  
Db 2 TTAATAAAAAAAAAA 19  
RESULT 570  
ADG28485/C  
ID ADG28485 standard; DNA; 19 BP.  
XX  
AC ADG28485;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Modified oligonucleotide seq id 6.  
XX  
KW antibacterial; protozoacide; antialgal; fungicide;  
KW internucleotide linkage; 2',5'-internucleotide linkage; 3'-substituent;  
KW antisense; pharmaceutical; RNA-DNA transcription;  
KW RNA-protein translation; infection; diagnostic; therapeutic;  
KW nuclease resistance; ss.  
XX  
XX Synthetic.  
OS  
XX  
PN US6653458-B1.  
XX  
PD 25-NOV-2003.

```
XX 08-NOV-1999; 99US-00435806.
PF
XX
PR 03-SEP-1993; 93US-00117363.
PR 02-SEP-1994; 94WO-US010131.
PR 28-FEB-1996; 96US-00602862.
PR 14-JUL-1998; 98US-00115043.
XX
XX (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD, Guinasso CJ;
XX
XX WPI; 2004-079586/08.
XX
XX New oligonucleotide comprising at least one 2',5'-internucleotide linkage
PT useful for treating organisms having disease caused by undesired
PT production of protein e.g. bacteria, yeast, protozoa and algae.
XX
XX Example 54; SEQ ID NO 6; 30pp; English.
XX
XX The invention describes an oligonucleotide comprising several nucleotides
CC covalently linked together by internucleotide linkages. At least one of
CC the nucleotides is linked to an adjacent nucleotide by 2',5'-
CC internucleotide linkage and bears a 3'-substituent. The oligonucleotides
CC are useful: as antisense oligonucleotides; in pharmaceutical compositions
CC ; for treating organisms having disease caused by undesired production of
CC protein e.g. organism that utilises RNA-DNA transcription or RNA-protein
CC translation, bacteria, yeast, protozoa, algae and warm-blooded animals;
CC for developing diagnostic and therapeutic agents. The modified
CC oligonucleotide exhibits improved properties of nuclease resistance and
CC binding affinity. The oligonucleotides are easy to synthesise and exhibit
CC good properties of nuclease resistance and hybridisation to target
CC nucleic acids. The oligonucleotide is potent antisense agent with longer
CC duration of action. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 19 AAAAAAAAAAAAAAAAAA 2
XX
RESULT 571
ADG28486/C
XX ID ADG28486 standard; DNA; 19 BP.
XX
AC ADG28486;
XX
XX 26-FEB-2004 (first entry)
XX
DE Modified oligonucleotide seq id 7.
XX
XX antibacterial; protozoicide; antialgal; fungicide;
KM internucleotide linkage; 2',5'-internucleotide linkage; 3'-substituent;
KM antisense; pharmaceutical; RNA-DNA transcription;
KM RNA-protein translation; infection; diagnostic; therapeutic;
KM nuclease resistance; ss.
XX
XX Synthetic.
XX
XX OS
XX
XX PN US6653458-B1.
XX
XX 25-NOV-2003.
XX
XX 08-NOV-1999; 99US-00435806.
XX
XX 03-SEP-1993; 93US-00117363.
XX
XX 02-SEP-1994; 94WO-US010131.
```

```
PR 28-FEB-1996; 96US-00602862.
PR 14-JUL-1998; 98US-00115043.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX
PI Manoharan M, Cook PD, Guinasso CJ;
XX
XX WPI; 2004-079586/08.
XX
XX New oligonucleotide comprising at least one 2',5'-internucleotide linkage
PT useful for treating organisms having disease caused by undesired
PT production of protein e.g. bacteria, yeast, protozoa and algae.
XX
XX Example 54; SEQ ID NO 7; 30pp; English.
XX
XX The invention describes an oligonucleotide comprising several nucleotides
CC covalently linked together by internucleotide linkages. At least one of
CC the nucleotides is linked to an adjacent nucleotide by 2',5'-
CC internucleotide linkage and bears a 3'-substituent. The oligonucleotides
CC are useful: as antisense oligonucleotides; in pharmaceutical compositions
CC ; for treating organisms having disease caused by undesired production of
CC protein e.g. organism that utilises RNA-DNA transcription or RNA-protein
CC translation, bacteria, yeast, protozoa, algae and warm-blooded animals;
CC for developing diagnostic and therapeutic agents. The modified
CC oligonucleotide exhibits improved properties of nuclease resistance and
CC binding affinity. The oligonucleotides are easy to synthesise and exhibit
CC good properties of nuclease resistance and hybridisation to target
CC nucleic acids. The oligonucleotide is potent antisense agent with longer
CC duration of action. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 572
ADG47994/C
XX ID ADG47994 standard; DNA; 19 BP.
XX
XX
AC ADG47994;
XX
XX 11-MAR-2004 (first entry)
XX
XX Oligonucleotide #3 used in the exemplification of the invention.
XX
XX Hybridisation; diagnosis; therapeutic; investigation; ss.
XX
XX Synthetic.
XX
XX OS
XX
XX Key Location/Qualifiers
XX FT modified_base 16..19
XX FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-[2-(guanidinium)ethyl] thymidine"
XX
XX US2003092046-A1.
XX
XX 15-MAY-2003.
XX
XX 20-SEP-2002; 2002US-00247893.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-2000; 2000US-00612531.
XX
XX (MANO/) MANOHARAN M.
XX
XX (COOK/) COOK P D.
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```
PA (PRAK/) PRAKASH T P.
PA (MOHA/) MOHAN V.
PI Manoharan M, Cook PD, Prakash TP, Mohan V;
DR WPI; 2004-031184/03.
XX
XX New oligomers containing guanidinium groups, useful for modulating gene
PT expression by hybridizing oligomer with single- or double-stranded
PT nucleic acids.
XX
XX Example 26; SEQ ID NO 3; 54pp; English.
XX
CC The present invention relates to novel oligonucleotides comprising
CC several nucleotide units which are specifically hybridisable with a
CC selected sequence of RNA or DNA wherein at least one of the nucleotide
CC moieties of the oligomer is modified to include a guanidinium group.
CC These oligonucleotides are useful for diagnostic, therapeutic and
CC investigative purposes. The present sequence is an oligonucleotide used
CC in the exemplification of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
OY
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2
RESULT 573
ADG48004/C
ID ADG48004 standard; DNA; 19 BP.
AC ADG48004;
XX
XX 11-MAR-2004 (first entry)
DE Oligonucleotide #11 used in the exemplification of the invention.
XX
XX Hybridisation; diagnosis; therapeutic; investigation; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 17
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-[2-(guanidinium)ethyl] thymidine"
FT modified_base 19
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-O-[2-(guanidinium)ethyl] thymidine"
XX
XX US2003092046-A1.
XX
XX 15-MAY-2003.
XX
XX 20-SEP-2002; 2002US-00247893.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-2000; 2000US-00612531.
XX
XX (MANO/) MANOHARAN M.
XX (COOK/) COOK P D.
XX (PRAK/) PRAKASH T P.
XX (MOHA/) MOHAN V.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX WPI; 2004-031184/03.
DR
```

```
XX
XX New oligomers containing guanidinium groups, useful for modulating gene
PT expression by hybridizing oligomer with single- or double-stranded
PT nucleic acids.
XX
XX Example 26; SEQ ID NO 13; 54pp; English.
XX
CC The present invention relates to novel oligonucleotides comprising
CC several nucleotide units which are specifically hybridisable with a
CC selected sequence of RNA or DNA wherein at least one of the nucleotide
CC moieties of the oligomer is modified to include a guanidinium group.
CC These oligonucleotides are useful for diagnostic, therapeutic and
CC investigative purposes. The present sequence is an oligonucleotide used
CC in the exemplification of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
OY
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2
RESULT 574
ADG47998/C
ID ADG47998 standard; DNA; 19 BP.
AC ADG47998;
XX
XX 11-MAR-2004 (first entry)
DE Oligonucleotide #5 used in the exemplification of the invention.
XX
XX Hybridisation; diagnosis; therapeutic; investigation; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 19
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-[2-(guanidinium)ethyl] thymidine"
FT modified_base 19
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-[2-(guanidinium)ethyl] thymidine"
XX
XX US2003092046-A1.
XX
XX 15-MAY-2003.
XX
XX 20-SEP-2002; 2002US-00247893.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-2000; 2000US-00612531.
XX
XX (MANO/) MANOHARAN M.
XX (COOK/) COOK P D.
XX (PRAK/) PRAKASH T P.
XX (MOHA/) MOHAN V.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX WPI; 2004-031184/03.
DR
XX
XX New oligomers containing guanidinium groups, useful for modulating gene
PT expression by hybridizing oligomer with single- or double-stranded
PT nucleic acids.
XX
XX Example 26; SEQ ID NO 7; 54pp; English.
XX
CC The present invention relates to novel oligonucleotides comprising
CC several nucleotide units which are specifically hybridisable with a
CC selected sequence of RNA or DNA wherein at least one of the nucleotide
```

CC moieties of the oligomer is modified to include a guanidinium group.  
CC These oligonucleotides are useful for diagnostic, therapeutic and  
CC investigative purposes. The present sequence is an oligonucleotide used  
CC in the exemplification of the invention.

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
|||  
19 AAAAAAAAAAAAAAAAAA 2

Db

RESULT 575  
ADH42933/C  
ID ADH42933 standard; DNA; 19 BP.

AC ADH42933;

XX 25-MAR-2004 (first entry)

XX Guanidinium functionalised oligonucleotide ISIS #109973.

XX ss; guanidinium functionalised nucleotide; guanidinium;

KW 2-O-guanidinium ethyl; increased binding affinity.

XX Synthetic.

XX Key Location/Qualifiers

FT modified\_base 19

FT /tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"

XX US6593466-B1.

XX 15-JUL-2003.

XX 07-JUL-1999; 99US-00349040.

XX 07-JUL-1999; 99US-00349040.

XX (ISIS-) ISIS PHARM INC.

XX Manoharan M, Cook PD, Prakash TP, Mohan V;

XX WPI; 2004-118052/12.

XX New guanidinium functionalized nucleotide compounds useful for preparing

PT oligomers used for diagnostic, therapeutic and investigative

PT applications.

PS Example 26; SEQ ID NO 5; 40pp; English.

XX The invention relates to a guanidinium functionalised nucleotide  
XX compounds. The guanidinium functionalised nucleotide compounds are used  
XX for preparation of oligomers useful for diagnostic, therapeutic and  
XX investigative applications. The 2-O-guanidinium ethyl modification  
XX increases binding affinity to a target. The present sequence represents a  
XX guanidinium functionalised oligonucleotide.

XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
|||  
19 AAAAAAAAAAAAAAAAAA 2

Db

RESULT 576  
ADH42931/C  
ID ADH42931 standard; DNA; 19 BP.

AC ADH42931;

XX 25-MAR-2004 (first entry)

XX Guanidinium functionalised oligonucleotide ISIS #109990.

XX ss; guanidinium functionalised nucleotide; guanidinium;

KW 2-O-guanidinium ethyl; increased binding affinity.

XX Synthetic.

XX Key Location/Qualifiers

FT modified\_base 16.19

FT /tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"

XX US6593466-B1.

XX 15-JUL-2003.

XX 07-JUL-1999; 99US-00349040.

XX 07-JUL-1999; 99US-00349040.

XX (ISIS-) ISIS PHARM INC.

XX Manoharan M, Cook PD, Prakash TP, Mohan V;

XX WPI; 2004-118052/12.

XX New guanidinium functionalized nucleotide compounds useful for preparing

PT oligomers used for diagnostic, therapeutic and investigative

PT applications.

PS Example 26; SEQ ID NO 3; 40pp; English.

XX The invention relates to a guanidinium functionalised nucleotide  
XX compounds. The guanidinium functionalised nucleotide compounds are used  
XX for preparation of oligomers useful for diagnostic, therapeutic and  
XX investigative applications. The 2-O-guanidinium ethyl modification  
XX increases binding affinity to a target. The present sequence represents a  
XX guanidinium functionalised oligonucleotide.

XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
|||  
19 AAAAAAAAAAAAAAAAAA 2

Db

RESULT 577  
ADH42932/C  
ID ADH42932 standard; DNA; 19 BP.

AC ADH42932;

XX 25-MAR-2004 (first entry)

XX Guanidinium functionalised oligonucleotide ISIS #109989.

XX ss; guanidinium functionalised nucleotide; guanidinium;

KW 2-O-guanidinium ethyl; increased binding affinity.



```
XX OS Synthetic.
XX PH Key
XX FT modified_base
XX FT Location/Qualifiers
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = 2-O-[2-(guanidinum)-ethyl] modified"
XX FT modified_base
XX FT 19
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER = 2-O-[2-(guanidinum)-ethyl] modified"
XX PN US659346-B1.
XX PD 15-JUL-2003.
XX PF 07-JUL-1999; 99US-00349040.
XX PR 07-JUL-1999; 99US-00349040.
XX RA (ISIS-) ISIS PHARM INC.
XX PI Manoharan M, Cook PD, Prakash TP, Mohan V;
XX DR WPI; 2004-118052/12.
XX PT New guanidinum functionalized nucleotide compounds useful for preparing
XX PT oligomers used for diagnostic, therapeutic and investigative
XX PT applications.
XX PS Example 26; SEQ ID NO 4; 40pp; English.
XX CC The invention relates to a guanidinum functionalised nucleotide
XX CC compounds. The guanidinum functionalised nucleotide compounds are used
XX CC for preparation of oligomers useful for diagnostic, therapeutic and
XX CC investigative applications. The 2'-O-guanidinum ethyl modification
XX CC increases binding affinity to a target. The present sequence represents a
XX CC guanidinum functionalised oligonucleotide.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX DB 19 AAAAAAAAAAAAAAAAAA 2
XX
XX RESULT 578
XX ADJ77769/C
XX ID ADJ77769 standard; DNA; 19 BP.
XX AC ADJ77769;
XX DT 06-MAY-2004 (first entry)
XX DE Modified antisense oligonucleotide #5.
XX OS Synthetic.
XX OS 2'-O-aminoethylthioethyl-modified ribosyl nucleoside;
XX KM antisense oligonucleotide; ss.
XX PN US6673912-B1.
XX PD 06-JAN-2004.
XX PF 11-APR-2002; 2002US-00121135.
XX PR 07-AUG-1998; 98US-00130566.
```

```
PR 06-AUG-1999; 99US-00370625.
XX OS (ISIS-) ISIS PHARM INC.
XX PH Manoharan M, Cook PD;
XX FT WPI; 2004-106293/11.
XX DR WPI; 2004-106293/11.
XX PT New 2'-O-aminoethylthioethyl-modified ribosyl nucleosides useful as
XX PT monomer for the synthesis of modified anti-sense oligonucleotides.
XX PS Disclosure; SEQ ID NO 5; 26pp; English.
XX CC The invention relates to 2'-O-aminoethylthioethyl-modified ribosyl
XX CC nucleosides. The modified ribosyl nucleosides are used as monomers for
XX CC the synthesis of modified antisense oligonucleotides, which are useful in
XX CC diagnosis and therapeutics (e.g. in gene therapy, for treating organisms
XX CC having a disease associated by the undesired production of proteins) and
XX CC as research reagents. The oligonucleotides obtained from the monomers
XX CC show enhanced hybrid binding affinity towards targeted DNA or RNA and
XX CC resistance towards nucleases. This sequence represents a modified
XX CC antisense oligonucleotide of the invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 4.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX DB 19 AAAAAAAAAAAAAAAAAA 2
XX
XX RESULT 579
XX ADJ77789/C
XX ID ADJ77789 standard; DNA; 19 BP.
XX AC ADJ77789;
XX DT 06-MAY-2004 (first entry)
XX DE Modified antisense oligonucleotide #25.
XX OS Synthetic.
XX OS 2'-O-aminoethylthioethyl-modified ribosyl nucleoside;
XX KM antisense oligonucleotide; ss.
XX PN US6673912-B1.
XX PD 06-JAN-2004.
XX PF 11-APR-2002; 2002US-00121135.
XX PR 07-AUG-1998; 98US-00130566.
XX PR 06-AUG-1999; 99US-00370625.
XX RA (ISIS-) ISIS PHARM INC.
XX PI Manoharan M, Cook PD;
XX DR WPI; 2004-106293/11.
XX PT New 2'-O-aminoethylthioethyl-modified ribosyl nucleosides useful as
XX PT monomer for the synthesis of modified anti-sense oligonucleotides.
XX PS Disclosure; SEQ ID NO 26; 26pp; English.
XX CC The invention relates to 2'-O-aminoethylthioethyl-modified ribosyl
XX CC nucleosides. The modified ribosyl nucleosides are used as monomers for
XX CC the synthesis of modified antisense oligonucleotides, which are useful in
XX CC diagnosis and therapeutics (e.g. in gene therapy, for treating organisms
```

CC having a disease associated by the undesired production of proteins) and  
CC as research reagents. The oligonucleotides obtained from the monomers  
CC show enhanced hybrid binding affinity towards targeted DNA or RNA and  
CC resistance towards nucleases. This sequence represents a modified  
CC antisense oligonucleotide of the invention.  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
Db 19 AAAAAAAAAAAAAAAAAA 2  
RESULT 580  
ADM42087/c  
ID ADM42087 standard; DNA; 19 BP.  
XX  
AC ADM42087;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
DE Exemplary DNA molecule.  
XX  
KM nanotube; nucleic acid sensor; DNA array; conductor; nanoparticle;  
KM biosensor; detection; screening; bacterial; viral; pharmaceutical;  
KM agricultural; food control; hygiene; environmental; forensic;  
KM nano-scale conductor; semiconductor; nano-electronic; prosthetic nerve;  
KM bio-electronic interface; transistor; gated device; ss.  
XX  
OS Synthetic.  
XX  
PN WO2004020450-A1.  
XX  
PD 11-MAR-2004.  
XX  
PF 29-AUG-2003; 2003WO-AU001118.  
XX  
PR 30-AUG-2002; 2002AU-00951274.  
XX  
PA (CSIR ) COMMONWEALTH SCI & IND RES ORG.  
XX  
PI Mccall M, Moghaddam M;  
XX  
DR WPI; 2004-269207/25.  
XX  
PT Carbon nanotube attached with one or more nucleic acid molecules, useful  
PT as biosensor for screening presence of bacterial or viral nucleic acid in  
PT clinical samples.  
XX  
PS Example 6; Page 91; 147p; English.  
XX  
CC The present invention describes a nanotube (I) attached with one or more  
CC nucleic acid molecule(s). Also described: (1) chemically modifying (M1) a  
CC nanotube; (2) physically modifying (M2) a nanotube; (3) linking (M3)  
CC nanotubes; (4) a several linked nanotubes (II) produced by (M3); (5)  
CC directing (M4) nanotubes to specific targets; (6) a nucleic acid sensor  
CC (III) comprising (I), where the base sequence of the attached nucleic  
CC acid molecule is substantially complementary to all or a portion of the  
CC base sequence of the nucleic acid molecules being detected; (7) a DNA  
CC array consisting of an array of groups of one or more nanotubes, each  
CC group having one or more nucleic acid molecules of the same base sequence  
CC attached to each nanotubes in the group, and where the base sequence of  
CC the nucleic acid molecules, attached to the nanotubes in one group  
CC differs from those in other groups so that a number of different target  
CC DNA molecules may be detected; (8) an actuator comprising (I) and a  
CC membrane support to which the DNA-modified nanotubes are attached; and  
CC (9) a conductor (IV) comprising (I). (I) is useful in coating one or more  
CC nanotubes with nanoparticles, which involves exposing (I) to  
CC nanoparticles comprising several attached complementary nucleic acid

CC molecules, where the nanoparticles hybridise to the nucleic acid  
CC molecules on the surface of the nanotube(s) as well as self-annealing to  
CC other nanoparticles, forming one or more coated nanotubes. (I) can be  
CC used as a biosensor for detecting complementary nucleic acid strands,  
CC useful in clinical application for screening presence of bacterial or  
CC viral nucleic acid, in pharmaceutical applications, agricultural  
CC applications, food control, hygiene and environmental monitoring and  
CC forensic applications. (II) is useful as a nano-scale conductor or  
CC semiconductor, more specifically as a component in nano-electronic  
CC applications, as a replacement for damaged nerves in prosthetic  
CC applications, or as the bio-electronic interface in bio-electronic  
CC devices. (III) can also be used as a transistor or gated device. The  
CC present sequence represents an oligonucleotide which is used in an  
CC example from the present invention.  
XX  
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 4.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
Db 19 AAAAAAAAAAAAAAAAAA 2  
RESULT 581  
ADM47150/c  
ID ADM47150 standard; DNA; 19 BP.  
XX  
AC ADM47150;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
DE 2'-O-MOE-2-thio modified oligonucleotide #3.  
XX  
KM ss; antisense; infection; inflammation; tumour;  
KM enhanced binding affinity.  
XX  
OS Synthetic.  
XX  
FT Key Location/Qualifiers  
FT modified\_base 16..19  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = 2'-O-[2-(methoxy-)ethyl]-2-thio-5-  
FT methyluridine"  
XX  
PN US2004033973-A1.  
XX  
PD 19-FEB-2004.  
XX  
PF 16-AUG-2002; 2002US-00222588.  
XX  
PR 16-AUG-2002; 2002US-00222588.  
XX  
PA (MANO/) MANOHARAN M.  
PA (PRAKASH T P.  
PA (RAJEEV/) RAJEEV K G.  
XX  
PI Manoharan M, Prakash TP, Rajeev KG;  
XX  
DR WPI; 2004-256363/24.  
XX  
PT New nucleoside compounds useful as antisense compounds to prevent or  
PT delay e.g. infection, inflammation or tumor formation.  
XX  
PS Example 211; SEQ ID NO 17; 96pp; English.  
XX  
CC The invention relates to nucleoside compounds. The nucleoside compounds  
CC are useful as antisense compounds in diagnostics, therapeutics,  
CC prophylaxis, and as research reagents and kits, and to prevent or delay  
CC infection, inflammation or tumour formation. The compounds have enhanced

```
CC binding affinity properties. The present sequence represents a 2'-O-MOE-2
CC -thio modified oligonucleotide.
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 582
AD058963/C
ID AD058963 standard; DNA; 19 BP.
XX
XX AD058963;
XX
XX 15-JUL-2004 (first entry)
XX
XX Oligonucleotide #4 used in animal studies.
XX
XX Renal uptake enhancement; therapy; infection; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX FH 16.19
XX FT modified_base
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "Modified with 2'-O-(2-N,N-dimethylaminoethyl)
XX FT oxyethyl]-5-methyl uridine"
XX
XX US2004009938-A1.
XX
XX 15-JAN-2004.
XX
XX 06-FEB-2003; 2003US-00359328.
XX
XX 07-AUG-1998; 98US-00130566.
XX PR 06-AUG-1999; 99US-00370625.
XX
XX (MANO/) MANOHARAN M.
XX PA (COOK/) COOK P D.
XX
XX Manoharan M, Cook PD;
XX
XX WPI; 2004-201317/19.
XX
XX Enhancing renal uptake of an oligomeric compound in the diagnostic and
XX therapeutic applications involves incorporating at least one modified
XX ribosyl nucleoside into the oligomeric compound.
XX
XX Example 19; SEQ ID NO 26; 21pp; English.
XX
XX The invention relates to 2'-O-modified ribosyl nucleosides and methods of
XX enhancing renal uptake of an oligomeric compound. The method is useful
XX for enhancing renal uptake of an oligomeric compound. The sequences of
XX the invention are useful in diagnostics, therapeutics and as research
XX reagents; and for treating infection caused by organisms (e.g. bacteria,
XX yeast, protozoa and algae) in plants and higher animals. The present
XX sequence is an oligonucleotide used in animal studies. This sequence is
XX used to illustrate the method of the invention.
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537
```

```
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 583
AD058942/C
ID AD058942 standard; DNA; 19 BP.
XX
XX AD058942;
XX
XX 15-JUL-2004 (first entry)
XX
XX Oligo, to illustrate enzymatic degradation of 2'-O-modified oligomers.
XX
XX Renal uptake enhancement; therapy; infection; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX FH 16.19
XX FT modified_base
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "Optionally 2'-O-modified with propyl,
XX FT methoxyethyl or DMAEOE"
XX
XX US2004009938-A1.
XX
XX 15-JAN-2004.
XX
XX 06-FEB-2003; 2003US-00359328.
XX
XX 07-AUG-1998; 98US-00130566.
XX PR 06-AUG-1999; 99US-00370625.
XX
XX (MANO/) MANOHARAN M.
XX PA (COOK/) COOK P D.
XX
XX Manoharan M, Cook PD;
XX
XX WPI; 2004-201317/19.
XX
XX Enhancing renal uptake of an oligomeric compound in the diagnostic and
XX therapeutic applications involves incorporating at least one modified
XX ribosyl nucleoside into the oligomeric compound.
XX
XX Example 19; SEQ ID NO 5; 21pp; English.
XX
XX The invention relates to 2'-O-modified ribosyl nucleosides and methods of
XX enhancing renal uptake of an oligomeric compound. The method is useful
XX for enhancing renal uptake of an oligomeric compound. The sequences of
XX the invention are useful in diagnostics, therapeutics and as research
XX reagents; and for treating infection caused by organisms (e.g. bacteria,
XX yeast, protozoa and algae) in plants and higher animals. The present
XX sequence is an oligonucleotide used to illustrate enzymatic degradation
XX of 2'-O-modified oligomers. This sequence is used to illustrate the
XX method of the invention.
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 584
AD059136/C
ID AD059136 standard; DNA; 19 BP.
XX
XX AD059136;
```

```
XX 09-SEP-2004 (first entry)
XX Tobacco cytochrome P450 PCR primer #6.
XX
XX se; primer; PCR; cytochrome P450; transgenic; tobacco; plant.
XX
XX Nicotiana sp.
XX
XX US2004117869-A1.
XX
XX 17-JUN-2004.
XX
XX 12-MAR-2003; 2003US-00387346.
XX
XX 11-JAN-2002; 2002US-0347444P.
XX 12-MAR-2002; 2002US-0363684P.
XX 10-JAN-2003; 2003US-00340861.
XX
XX (USSM-) US SMOKELESS TOBACCO CO.
XX
XX Xu D;
XX
XX WPI; 2004-449487/42.
XX
XX An isolated nucleic acid molecule, comprising nucleic acid sequence of
XX Nicotiana derived cytochrome P450 enzyme fragments, useful for producing
XX transgenic plants.
XX
XX Disclosure; SEQ ID NO 154; 82pp; English.
XX
XX The invention relates to an isolated nucleic acid molecule (I),
XX comprising a nucleic acid sequence chosen from 75 Nicotiana-derived
XX cytochrome P450 enzyme fragment sequences. (I) is useful for producing a
XX transgenic tobacco plant, which involves operably linking (I) with a
XX promoter functional in the plant to create a plant transformation vector,
XX and transforming the plant with the plant transformation vector,
XX selecting a plant cell transformed with the transformation vector, and
XX regenerating a plant from the selected plant cell. The nucleic acid
XX molecule is in an antisense orientation, sense orientation or is in a RNA
XX interference orientation. The present sequence represents a PCR primer
XX used to clone DNA encoding tobacco cytochrome P450 enzyme fragments of
XX the invention.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
Db 19 AAAAAAAAAAAAAAAAAA 2
RESULT 585
ADOS9144/C
ID ADO59144 standard; DNA; 19 BP.
XX
XX ADO59144;
XX
XX 09-SEP-2004 (first entry)
XX
XX Tobacco cytochrome P450 PCR primer #14.
XX
XX se; primer; PCR; cytochrome P450; transgenic; tobacco; plant.
XX
XX Nicotiana sp.
XX
XX US2004117869-A1.
XX
XX 17-JUN-2004.
XX
XX
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PF 12-MAR-2003; 2003US-00387346.
XX
XX 11-JAN-2002; 2002US-0347444P.
XX 12-MAR-2002; 2002US-0363684P.
XX 10-JAN-2003; 2003US-00340861.
XX
XX (USSM-) US SMOKELESS TOBACCO CO.
XX
XX Xu D;
XX
XX WPI; 2004-449487/42.
XX
XX An isolated nucleic acid molecule, comprising nucleic acid sequence of
XX Nicotiana derived cytochrome P450 enzyme fragments, useful for producing
XX transgenic plants.
XX
XX Disclosure; Fig 73; 82pp; English.
XX
XX The invention relates to an isolated nucleic acid molecule (I),
XX comprising a nucleic acid sequence chosen from 75 Nicotiana-derived
XX cytochrome P450 enzyme fragment sequences. (I) is useful for producing a
XX transgenic tobacco plant, which involves operably linking (I) with a
XX promoter functional in the plant to create a plant transformation vector,
XX and transforming the plant with the plant transformation vector,
XX selecting a plant cell transformed with the transformation vector, and
XX regenerating a plant from the selected plant cell. The nucleic acid
XX molecule is in an antisense orientation, sense orientation or is in a RNA
XX interference orientation. The present sequence represents a PCR primer
XX used to clone DNA encoding tobacco cytochrome P450 enzyme fragments of
XX the invention.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 586
AAQ25565/C
ID AAQ25565 standard; DNA; 20 BP.
XX
XX AAQ25565;
XX
XX 25-MAR-2003 (revised)
XX 02-DEC-1992 (first entry)
XX
XX Dye-coupled 3'-amino modified oligonucleotide.
XX
XX DNA synthesis; RNA; antisense strands; detection; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 20
XX FT /**tag= a
XX FT /note= "3-amino modified"
XX
XX EP490281-A1.
XX
XX 17-JUN-1992.
XX
XX 06-DEC-1991; 91EP-00120935.
XX
XX 11-DEC-1990; 90DE-04039488.
XX
XX (FARH ) HOECHST AG.
XX
XX Engels J, Herrlein M, Konrad R, Mag M;
XX
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XX DR WPI; 1992-201578/25.
XX
XX PT New dye-coupled modified nucleosides, nucleotides and oligo-nucleotides -
XX useful for synthesis of antisense DNA and RNA strands in presence of
XX template, also for in-vivo and in-vitro detection of genetic material.
XX
XX PS Example; Page 9; 17pp; German.
XX
XX CC The sequence is an example of a dye coupled 3'-amino modified oligo-
XX nucleotide, it can be used in the synthesis of DNA and RNA nucleosides,
XX nucleotides and oligonucleotides and for the synthesis of opposite
XX strands in the presence of a template strand and in fluorescence
XX microscopic and macroscopic detection in vivo and in vitro of genetic
XX material. It is labelled with a fluorescent dye. See also AAQ25566 and
XX AAQ25567. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAG 1537
DB 20 AAAAAAAAAAAAAAAAAA 3

RESULT 587
AAQ20129/C
ID AAQ20129 standard; DNA; 20 BP.
XX
XX AC AAQ20129;
XX
XX DT 01-APR-1992 (first entry)
XX
XX DE Cross-linking oligomer 411 to target Human RSV.
XX
XX KM deoxyribonucleic acid; major groove; ethanoinmimo group;
XX inverted polarity region; human respiratory syncytial virus; ss.
XX
XX OS Synthetic.
XX
XX FH Key
XX modified_base Location/Qualifiers
XX /*tag= a
XX /mod_base= m5c
XX modified_base 8
XX /*tag= b
XX /mod_base= OTHER
XX /note= "N-methyl-8-oxo-2'-deoxyadenine"
XX modified_base 9
XX /*tag= c
XX /mod_base= m5c
XX modified_base 14
XX /*tag= d
XX /mod_base= m5c
XX misc_feature 16..20
XX /*tag= e
XX /label= inverted_polarity_region
XX /note= "see comments"
XX modified_base 18
XX /*tag= f
XX /mod_base= m5c

XX
XX PN WO9118997-A.
XX
XX PD 12-DEC-1991.
XX
XX PF 25-MAY-1990; 90US-00529346.
XX
XX PR 25-MAY-1990; 90US-00529346.
XX 14-JAN-1991; 91US-00640654.

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XX PA (GILE-) GILEAD SCIE INC.
XX
XX PI Matteucci MD, Krawczyk S;
XX
XX DR WPI; 1992-007480/01.
XX
XX PT New sequence-specific non-photo-activated crosslinking agents - bind to
XX the major groove of duplex DNA and are esp. useful for treating latent
XX infections e.g. HIV.
XX
XX PS Example 4; Page 28; 42pp; English.
XX
XX CC This oligomer contains an inverted polarity region formed from an o'-
XX xylosio dimer synthon. Residues 15 and 16 are linked via an o-xylosio group
XX (i.e. nucleotides that have xylose sugar linked via the o-xylosio ring).
XX The sequence is designed to target the Human Respiratory Syncytial virus
XX beginning at nucleotide 5994 and to covalently cross-link to it. See also
XX AAQ20126-Q20130
XX
XX SQ Sequence 20 BP; 1 A; 4 C; 0 G; 15 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1521 AAAAAAAAAAGTAAAG 1538
DB 20 AAGAAAGAAAGTAAAG 3

RESULT 588
AAQ33554/C
ID AAQ33554 standard; DNA; 20 BP.
XX
XX AC AAQ33554;
XX
XX DT 25-MAR-2003 (revised)
XX
XX DT 02-FEB-1993 (first entry)
XX
XX DE Microsatellite sequence from clone AGLA247.
XX
XX KM PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
XX genetic mapping; traits; amplification; ss.
XX
XX OS Bos taurus.
XX
XX PN WO9213102-A1.
XX
XX PD 06-AUG-1992.
XX
XX PF 15-JAN-1992; 92WO-US000340.
XX
XX PR 15-JAN-1991; 91US-00642342.
XX
XX PA (GENM-) GENMARK.
XX
XX PI Georges M, Massey JM;
XX
XX DR WPI; 1992-284684/34.
XX
XX PT Polymorphic bovine DNA markers - used in genetic identification, gene
XX mapping, and selective breeding.
XX
XX PS Table 7; Page 150; 517pp; English.
XX
XX CC The sequence is that of a bovine microsatellite sequence obt'd. by
XX screening a library of bovine MboI DNA fragments of between 250 and 500
XX bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
XX clones cross-hybridised. Assuming independent distribution of
XX microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
XX in the bovine genome is estimated at >100, 000. The sequence information
XX for ca. 230 such bovine microsatellites is summarised in the

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[illegible]

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XX      17-APR-1991;       91US-00686547.
PR     27-SEP-1991;       91US-00766733.
XA      (GILE-) GILEAD SCI INC.
XX      Froehler B, Krawczyk S, Matteucci MD, Milligan J;
PI      WFI; 1992-217083/26.
XX      New oligomers contg. modified bases - which form a triplex with G-C
PT      double in a DNA duplex, for treating and diagnosing HIV, hepatitis,
PT      herpes malignancy and inflammation.
XX      Claim 12; Page 66; 77pp; English.
XX
CC      The synthetic oligomer is capable of forming a triplex at physiological
CC      pH with a purine rich target sequence by coupling into the major groove
CC      of the duplex. The specific target sequence of this oligomer is an RSV
CC      target duplex beginning at nucleotide 5994 contg. a purine-rich region
CC      concentrated on one chain of the duplex. The oligomer, and others like it
CC      are useful in diagnosis and therapy of diseases characterised by specific
CC      DNA duplex targets, e.g. respiratory syncytial virus, papillomavirus,
CC      HIV, hepatitis, herpes, malignant tumours and inflammation. The triple
CC      helices form under mild conditions thus assays may be carried out without
CC      subjecting the test specimen to harsh conditions. The oligomer contains
CC      an inverted polarity region formed from an o-xylolo dimer synthon. The
CC      linking gp. is o-xylolo (nucleotides have the 3' positions of xylolo
CC      sugars linked via the o-xylene ring). Two nucleotides are coupled through
CC      a xylene residue to form the dimer synthon. This additional modifications
CC      may render the oligomer stable to nuclease activity. The oligomer is able
CC      to inhibit gene expression, as verified by in vitro systems. See also
CC      AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN
CC      field.)
CC      XX
SQ      Sequence 20 BP; 1 A; 4 C; 0 G; 15 T; 0 U; 0 Other;
XX
OY      Query March           1.1%; Score 14.8; DB 1; Length 20;
DB      Best Local Similarity   88.9%; Pred. No. 4.4e+02;
        Matches    16; Conservative    0; Mismatches    2; Indels    0; Gaps    0.
        1521 AAAAAAAAAAGTAAAG 1538
            |||||
Db      20 AAGGAAGAATAAAG 3
XXXXXXXXXXXXXXXXXXXXX
RESULT 590
AC      AAQ49436/C
ID      AAQ49436 standard; cDNA; 20 BP.
XX
XX      AAQ49436;
AC      25-MAR-2003 (revised)
DT      27-Apr-1994 (first entry)
XX
DE      Cytochrome P450 sequence amplification PCR primer polyT.
XX      Transgenic plants; altered petal colour; polymerase chain reaction; ss.
XX      Synthetic.
OS      OS
XX      WO93320206-A1.
PN      14-OCT-1993.
XX
PF      25-MAR-1993; 93WO-AU000127.
PD
XX      27-MAR-1992; 92AU-00001538.
PR      07-JAN-1993; 93AU-00006598.
XX
PA      (ITFL-) INT FLOWER DEV PTY LTD.
XT
XT      Holton TA, Cornish EC, Tanaka Y;

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DR  WPI; 1993-336914/42.
XX
XX  Nucleic acid isolate encoding flavonoid-3'-hydroxylase - is used to
PT  create transgenic plants with altered petal colour.
XX
XX  Disclosure; Page 25; 86pp; English.
XX
XX  The sequence is that of a PCR primer which was used in polymerase chain
CC  reactions for the amplification of cloned cytochrome P450 sequences.
CC  (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ  Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAAAAAGTAAA 1536
DB 18 TAAAAAAAAAAAAAAAAA 1

RESULT 591
AA058578
ID AA058578 standard; RNA; 20 BP.
XX
XX  AA058578;
XX
XX  25-MAR-2003 (revised)
DT  21-AUG-1994 (first entry)
XX
XX  Sequence of synthetic RNA oligo which is a target nucleotide for a novel
DE  receptor.
XX
XX  Novel receptor; nucleic acid; transport; oligo; ss.
XX
XX  Synthetic.
OS
XX  WO9404194-A1.
XX
XX  03-MAR-1994.
XX
XX  13-AUG-1993; 93WO-US007603.
XX
XX  14-AUG-1992; 92US-00930087.
XX
XX  (MASI ) MASSACHUSETTS INST TECHNOLOGY.
XX
XX  Ueman N, Rebek J, De Mendoza J;
XX
XX  WPI; 1994-082846/10.
XX
XX  Transport of nucleic acid derivs. across membranes - using new receptors
PT  which use salt bridging, aromatic stacking, hydrogen bonding and
PT  chelation.
XX
XX  Example; Table 1, page 38; 103pp; English.
XX
XX  The inventors claim a method of transporting a nucleic acid deriv. across
CC  a membrane which comprises using a receptor that uses salt bridging,
CC  aromatic stacking, H bonding and chelation to recognise the nucleic acid
CC  deriv. AA056305, AA058577-86 are nucleic acid derivs used in the
CC  examples. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX
SQ  Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAA 1537
DB 1 AAAAAAAAAAAAAAAAAA 18

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RESULT 592.
AA094205/C
ID AA094205 standard; DNA; 20 BP.
XX
XX  AA094205;
XX
XX  25-MAR-2003 (revised)
DT  24-AUG-1995 (first entry)
XX
XX  Alpha-anomeric oligonucleotide ligand 1803 for oestradiol hapten.
DE
XX  Oligonucleotide ligand; steroid hormone; hapten; immobilisation;
XX  immunodetection; estradiol; alpha-anomer; ss.
XX
XX  Synthetic.
OS
XX  Key
FH  Location/Qualifiers
FT  1..21
FT  misc_feature
FT  /*tag= b
FT  /note= "the glycosidic bonds between nucleotides are all
FT  in the alpha-anomer form"
FT  modified_base
FT  20
FT  /*tag= a
FT  /mod_base= OTHER
FT  /note= "carries a group derived from aminopropanediol"
XX
XX  WO9429723-A1.
XX
XX  22-DEC-1994.
XX
XX  10-JUN-1994; 94WO-FR000689.
XX
XX  11-JUN-1993; 93FR-00007093.
XX
XX  (CROS/) CROS P.
XX  (KURF/) KURFURST R.
XX  (BAT/) BATTAIL N.
XX  (PIGA/) PIGA N.
XX
XX  CROS P, Kurfurst R, Battail N, Piga N;
XX
XX  WPI; 1995-036665/05.
XX
XX  Assay device for hapten or its specific antibodies - comprises support
PT  having competitive reagent immobilised via nucleic acid ligand to improve
PT  orientation and accessibility.
XX
XX  Example 1; Page 10; 39pp; French.
XX
XX  Oligonucleotides (AA094201-Q94205) were synthesised for use as ligands.
CC  The ligands are covalently linked to a hapten (esp. a steroid hormone) to
CC  form a conjugate which is then immobilised on a solid support for
CC  interaction with antibodies against the hapten. Nucleic acid ligands are
CC  less likely to be recognised by the antibodies than are peptide ligands
CC  and nucleic acids are also less likely to undergo intramolecular
CC  organisation which interferes with accessibility of the hapten to the
CC  antibodies. For immunodiagnosis of oestradiol, the active hapten
CC  oestradiol-6-carboxymethoxime-N-hydroxysuccinimide ester was used.
XX
XX  (Updated on 25-MAR-2003 to correct PN field.)
XX
XX
SQ  Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAAGTAAA 1537
DB 20 AAAAAAAAAAAAAAAAAA 3

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RESULT 593
AAQ75584/c
ID AAQ75584 standard; DNA; 20 BP.
XX
AC AAQ75584;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KM Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 2 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAAAAAGTAAA 1536
Db 18 TAAAAAAAAAAAAAAAAA 1
XX
RESULT 594
AAQ75575/c
ID AAQ75575 standard; DNA; 20 BP.
XX
AC AAQ75575;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KM Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX

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PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1519 TAAAAAAAAAAGTAAA 1536
Db 18 TAAAAAAAAAAAAAAAAA 1
XX
RESULT 595
AAQ75586/c
ID AAQ75586 standard; DNA; 20 BP.
XX
AC AAQ75586;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KM Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX

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Query Match          1.1%  Score 14.8; DB 1;  Length 20;
Best Local Similarity 88.9%;  Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1519 TAAAAAAGTAA 1536
      |||||
Db      18 TAAAAA 1

RESULT 596
AAQ75583/C
AAQ75583 standard; DNA; 20 BP.

XX
XX
XX      AAQ75583;
XX
XX      04-AUG-1995 (first entry)
XX
XX      Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX      Analysis; gene expression; reverse transcription; primer; cDNA;
XX      aggregate; restriction enzyme; ss.
XX
XX      Synthetic.
XX      OS
XX      JP06303997-A.
XX      PN
XX      01-NOV-1994.
XX      PD
XX      16-APR-1993; 93JP-00112515.
XX      PF
XX      16-APR-1993; 93JP-00112515.
XX      PR
XX      16-APR-1993; 93JP-00112515.
XX
XX      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX      WPI; 1995-018287/03.
XX
XX      Analysis of cDNA and gene expression - by amplification of mRNA followed
PT      by digestion with restriction enzymes.
PT      by digestion with restriction enzymes.
XX
XX      Disclosure; Page 5, 11pp; Japanese.
XX
XX      A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC      labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC      and using the aggregate of mRNAs as the template for each reverse
CC      transcription primer; (b) digesting each of the prepared aggregates of
CC      the double-stranded cDNAs with restriction enzyme and; (c)
CC      electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX      method can be used to analyse gene expression rapidly and easily
XX
XX      Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SO

Query Match          1.1%  Score 14.8; DB 1;  Length 20;
Best Local Similarity 88.9%;  Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1519 TAAAAAAGTAA 1536
      |||||
Db      18 TAAAAA 1

RESULT 597
AAQ75578/C
AAQ75578 standard; DNA; 20 BP.

XX
XX
XX      AAQ75578;
XX
XX      04-AUG-1995 (first entry)
XX
XX      Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX      Analysis; gene expression; reverse transcription; primer; cDNA;
XX      aggregate; restriction enzyme; ss.
XX
XX      Synthetic.
XX      OS
XX      JP06303997-A.
XX      PN
XX      01-NOV-1994.
XX      PD
XX      16-APR-1993; 93JP-00112515.
XX      PF
XX      16-APR-1993; 93JP-00112515.
XX      PR
XX      16-APR-1993; 93JP-00112515.
XX
XX      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX      WPI; 1995-018287/03.
XX
XX      Analysis of cDNA and gene expression - by amplification of mRNA followed
PT      by digestion with restriction enzymes.
PT      by digestion with restriction enzymes.
XX
XX      Disclosure; Page 5, 11pp; Japanese.
XX
XX      A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC      labelled reverse transcription primers (GENSEQ files AAQ75547-075798)
CC      and using the aggregate of mRNAs as the template for each reverse
CC      transcription primer; (b) digesting each of the prepared aggregates of
CC      the double-stranded cDNAs with restriction enzyme and; (c)
CC      electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX      method can be used to analyse gene expression rapidly and easily
XX
XX      Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SO

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KM	aggregate; restriction enzyme; ss.
XX	
OS	Synthetic.
XX	
PN	JP06303997-A.
XX	
PD	01-NOV-1994.
XX	
PF	16-APR-1993; 93JP-00112515.
XX	
PR	16-APR-1993; 93JP-00112515.
XX	
PA	(NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX	
DR	WPI; 1995-018287/03.
XX	
PT	Analysis of cDNA and gene expression - by amplification of mRNA followed
PT	by digestion with restriction enzymes.
XX	
PS	Disclosure; Page 5; 11pp; Japanese.
XX	
CC	A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC	double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC	labelled reverse transcription primers (GENESER files AAQ75547-Q75798)
CC	and using the aggregate of mRNAs as the template for each reverse
CC	transcription primer; (b) digesting each of the prepared aggregates of
CC	the double-stranded cDNAs with restriction enzyme and; (c)
CC	electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC	method can be used to analyse gene expression rapidly and easily
XX	
SO	Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
	Query Match 1.1%; Score 14.8; DB 1; Length 20;
	Best Local Similarity 88.9%; Pred.No. 4.4e+02;
	Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	1519 TAAAAAAAAAAGTAA 1536
DB	18 TAAAAAAAAAAAAA 1
RESULT 598	
AAQ75590/C	
ID	AAQ75590 standard; DNA; 20 BP.
XX	
AC	AAQ75590;
XX	
DT	04-AUG-1995 (first entry)
XX	
XX	Reverse transcription primer used in cDNA analysis technique.
DE	
XX	Analysis; gene expression; reverse transcription; primer; cDNA;
KW	aggregate; restriction enzyme; ss.
XX	
OS	Synthetic.
XX	
PN	JP06303997-A.
XX	
PD	01-NOV-1994.
XX	
PF	16-APR-1993; 93JP-00112515.
XX	
PR	16-APR-1993; 93JP-00112515.
XX	
PA	(NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX	
DR	WPI; 1995-018287/03.
XX	
PT	Analysis of cDNA and gene expression - by amplification of mRNA followed
PT	by digestion with restriction enzymes.
XX	
PS	Disclosure; Page 5; 11pp; Japanese.
XX	

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CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
OY Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db 1519 TAAAAAAAAAAGTAAA 1536
18 TAAAAAAAAAAAAAAAAA 1
RESULT 599
AAQ75576/c
ID AAQ75576 standard; DNA; 20 BP.
AC AAQ75576;
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
OY Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db 1519 TAAAAAAAAAAGTAAA 1536
18 TAAAAAAAAAAAAAAAAA 1
RESULT 600
```

```
AAQ75587/c
ID AAQ75587 standard; DNA; 20 BP.
XX
XX AAQ75587;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
OY Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db 1519 TAAAAAAAAAAGTAAA 1536
18 TAAAAAAAAAAAAAAAAA 1
RESULT 601
AAQ30405/c
ID AAQ30405 standard; DNA; 20 BP.
XX
XX AAQ30405;
AC
XX
XX 08-JAN-1996 (first entry)
DT
XX
XX T2 (synthetic DNA probe with 5' amino terminal #4).
DE
XX
XX T2; HLA; dQa; self-addressable electronic device; SAED; hybridisation;
KM ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH 1
FT misc_feature
FT /*tag= a
FT /note= "3' aminolink2 Thymine; allows binding to any
XX amine"
XX
XX W09512808-A1.
```

XX 11-MAY-1995.  
 PD 26-OCT-1994; 94MO-US012270.  
 XX 01-NOV-1993; 93US-00146504.  
 XX (NANO-) NANOGEN INC.  
 XX  
 PI Heller MJ, Tu E;  
 XX WPI; 1995-185870/24.  
 DR  
 XX New self-addressable electronic devices - used for multi-step and  
 PT multiplex reactions such as DNA hybridisation(s), clinical diagnostics  
 PT and bio-polymer syntheses.  
 XX  
 PS Example 1; Page 41; 86pp; English.  
 XX  
 CC The sequences represented by, AA090402-15 are synthetic DNA probes  
 CC containing 5' amino termini. The sequences shown in AA090390-401 are  
 CC synthetic DNA probes with 3' ribonucleoside termini. These sequences were  
 CC specific for the polymorphisms of HLA gene dQa. The sequences were used  
 CC in the device of the invention. This is a self-addressable electronic  
 CC device (SABED) that can be used to carry out multi-step and multiplex  
 CC reactions, such as nucleic acid hybridisations. The advantages of this  
 CC method are that these reactions can be carried out with complete and  
 CC precise electronic control, and that the rate, specificity and  
 CC sensitivity of these reactions are greatly improved at micro-locations  
 CC  
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
 |||||  
 Db 20 AAAAAAAAAAAAAAAAAA 3

RESULT 602  
 AA04917/c  
 ID AA04917 standard; cDNA: 20 BP.  
 XX  
 AC AA04917;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 15-MAY-1996 (first entry)  
 XX  
 DE Mammalian stem cell factor (SCF) cDNA oligonucleotide primer 220-3.  
 XX  
 KW Stem cell factor; progenitor; haematopoiesis; SCF; anaemia;  
 KW thrombocytopenia; leucopenia; AIDS; immunodeficiency; bone graft;  
 KW transplant; neoplasia; myelosuppression; bone marrow; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN EP676470-A1.  
 XX  
 PD 11-OCT-1995.  
 XX  
 PF 04-OCT-1990; 95SEP-00105391.  
 XX  
 PR 16-OCT-1989; 89US-00422383.  
 PR 11-JUN-1990; 90US-00537198.  
 PR 24-AUG-1990; 90US-00573616.  
 PR 28-SEP-1990; 90MO-US005548.  
 PR 01-OCT-1990; 90US-00589701.  
 XX  
 PA (AMGE-) AMGEN INC.  
 XX  
 PI Zeebo KM, Sugas SV, Bosseiman RA, Martin FH;

XX WPI; 1995-346090/45.  
 XX  
 PT New stem cell factor polypeptide(s) - for stimulating the growth of  
 PT primitive progenitor cells, esp. for treating disorders involving blood  
 PT cells.  
 XX  
 PS Example 3; Fig 12C; 127pp; English.  
 XX

CC AA04915-T04922 are oligonucleotide primers and probes used for the  
 CC amplification and sequencing of mammalian stem cell factor (SCF). Non-  
 CC naturally occurring SCF and C-terminally truncated polypeptides, having  
 CC amino acid sequences sufficiently duplicative of naturally occurring SCF,  
 CC stimulate growth of primitive progenitors such as haematopoietic  
 CC progenitor cells, neural stem cells and primordial germ stem cells. The  
 CC peptides can be used in a composition for treating leucopenia, anaemia or  
 CC thrombocytopenia, for enhancing engraftment of bone marrow during  
 CC transplantation or for bone marrow recovery after chemotherapy or  
 CC radiation-induced bone marrow aplasia or myelosuppression. They can also  
 CC be used for treating neoplasia, nerve damage, infertility, intestinal  
 CC damage or myeloproliferative disorders. Antibodies may be raised against  
 CC the peptides for use in detection or neutralisation of SCF in serum. SCF  
 CC may be useful for the treatment of AIDS and severe combined  
 CC immunodeficiency (SCID) states alone or in combination with other factors  
 CC such as IL-7. (Updated on 25-MAR-2003 to correct PF field.)  
 XX

SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
 |||||  
 Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 603  
 AA04918/c  
 ID AA04918 standard; cDNA: 20 BP.  
 XX  
 AC AA04918;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 15-MAY-1996 (first entry)  
 XX  
 DE Mammalian stem cell factor (SCF) cDNA oligonucleotide primer 220-11.  
 XX  
 KW Stem cell factor; progenitor; haematopoiesis; SCF; anaemia;  
 KW thrombocytopenia; leucopenia; AIDS; immunodeficiency; bone graft;  
 KW transplant; neoplasia; myelosuppression; bone marrow; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN EP676470-A1.  
 XX  
 PD 11-OCT-1995.  
 XX  
 PF 04-OCT-1990; 95SEP-00105391.  
 XX  
 PR 16-OCT-1989; 89US-00422383.  
 PR 11-JUN-1990; 90US-00537198.  
 PR 24-AUG-1990; 90US-00573616.  
 PR 28-SEP-1990; 90MO-US005548.  
 PR 01-OCT-1990; 90US-00589701.  
 XX  
 PA (AMGE-) AMGEN INC.  
 XX  
 PI Zeebo KM, Sugas SV, Bosseiman RA, Martin FH;  
 XX  
 DR WPI; 1995-346090/45.  
 XX  
 PT New stem cell factor polypeptide(s) - for stimulating the growth of

PT primitive progenitor cells, esp. for treating disorders involving blood  
PT cells.  
XX  
PS Example 3; Fig 12C; 127bp; English.  
XX  
CC AA094915-704922 are oligonucleotide primers and probes used for the  
CC amplification and sequencing of mammalian stem cell factor (SCF). Non-  
CC naturally occurring SCF and C-terminally truncated polypeptides, having  
CC amino acid sequences sufficiently duplicative of naturally occurring SCF,  
CC stimulate growth of primitive progenitors such as haematopoietic  
CC progenitor cells, neural stem cells and primordial germ stem cells. The  
CC peptides can be used in a composition for treating leucopenia, anaemia or  
CC thrombocytopenia, for enhancing engraftment of bone marrow during  
CC transplantation or for bone marrow recovery after chemotherapy or  
CC radiation-induced bone marrow aplasia or myelosuppression. They can also  
CC be used for treating neoplasia, nerve damage, infertility, intestinal  
CC damage or myeloproliferative disorders. Antibodies may be raised against  
CC the peptides for use in detection or neutralisation of SCF in serum. SCF  
CC may be useful for the treatment of AIDS and severe combined  
CC immunodeficiency (SCID) states alone or in combination with other factors  
CC such as IL-7. (Updated on 25-MAR-2003 to correct PF field.)  
XX  
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 18 AAAAAAAAAAAAAAAAAA 1  
RESULT 604  
ID AAT88393 standard; DNA; 20 BP.  
AC AAT88393;  
XX  
DT 23-APR-1998 (first entry)  
XX  
XX Primer from J09248185 Example 1.  
DE  
XX Corn barnacle; G-protein; binding receptor; secondary gene; ship;  
KM protection; wharf; drainage; primer; ss.  
XX  
XX Synthetic.  
OS  
XX JP09248185-A.  
FN  
XX  
XX 22-SEP-1997.  
PD  
XX 13-MAR-1996; 96JP-00055923.  
PF  
XX 13-MAR-1996; 96JP-00055923.  
PR  
XX 13-MAR-1996; 96JP-00055923.  
PT  
XX (KAIY-) KAIYO BIOTECHNOLOGY KENKYUSHO KK.  
PA  
XX WPI; 1997-520739/48.  
DR  
XX Corn barnacle G-protein binding receptor secondary gene - useful to  
PT develop protection against corn barnacle attachment, e.g. to bottoms of  
PT ships, wharf(s) and drainage.  
XX  
PS Example 1; Page 4; 6pp; Japanese.  
XX  
XX The present sequence represents a primer used in an example in the  
CC present invention describing corn barnacle G-protein binding receptor  
CC secondary gene. Corn barnacles, which attach themselves to the bottoms of  
CC ships, wharfs and drainage, cause serious damage in industry. The corn  
CC barnacle G-protein binding receptor secondary gene, which is involved in  
CC the mechanisms of such attachment, can be used to develop a protection  
CC against corn barnacle attachment. The invention comprises isolating and

CC cloning DNA from the corn barnacle Balanus amphitrite, and inserting it  
CC into a vector. Host microorganisms are transformed with the vector to  
CC give a DNA library, from which a positive clone is selected using a  
CC colony hybridisation probe, and target gene selection from the positive  
CC clone using Southern hybridisation. E. coli JM109 carrying the plasmid  
CC pUC-BAR2, which contains the corn barnacle G-protein binding receptor  
CC secondary gene, has been deposited as FERM P-15509 with the National  
CC Institute of Bioscience and Human Technology, Agency of Industrial  
CC Science, Japan  
XX  
SQ Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 827 CGTCATCAGCGCGCTGT 844  
DB 1 CGTCATCATGCGCTGTT 18  
RESULT 605  
ID AAT63649 standard; DNA; 20 BP.  
AC AAT63649;  
XX  
DT 06-JUN-1997 (first entry)  
XX  
DE Anti-HTLV antisense reference oligonucleotide HT.  
XX  
XX antisense; complementary; tax gene; inhibit; HTLV-1;  
KM human T-cell lymphotropic virus type 1; viral antigen expression; ss.  
XX  
XX Synthetic.  
OS  
XX JP09052898-A.  
FN  
XX  
XX 25-FEB-1997.  
PD  
XX 09-AUG-1995; 95JP-00224606.  
PF  
XX 09-AUG-1995; 95JP-00224606.  
PR  
XX 09-AUG-1995; 95JP-00224606.  
PT  
XX (SOYA-) SOYAKU GIJUTSU KENKYUSHO KK.  
PA  
XX  
XX WPI; 1997-197252/18.  
DR  
XX  
XX Anti-HTLV-1 anti-sense oligonucleotide - is complementary to region of  
PT tax gene from human T-cell lymphotropic virus type 1 and inhibits viral  
PT antigen expression.  
PT  
XX  
PS Example 1; Page 8; 10pp; Japanese.  
XX  
XX Oligonucleotides having a partial sequence consisting of at least 15  
CC bases of AAT63641 (an antisense oligo complementary to a region of the  
CC tax gene which can inhibit human T-cell lymphotropic virus type 1 (HTLV-  
CC 1) viral antigen expression) are claimed. In an example, six antisense  
CC oligos were designed, T1-T6 (AAT63650-55) and were compared to six oligos  
CC derived from other regions of HTLV-1, i.e. S1 (splice junction), P1  
CC (p21), R1 (tax), R1 (tax response element), E1 (env) and G1 (gag), four  
CC reference oligonucleotides T15 (tax-sense), HC (dC20), HT (dT20)  
CC (AAT63647-49) and a random 20mer (RAN) in a HTLV-1 virus antigen  
CC expression inhibiting test. Oligonucleotide T1 gave the best results  
XX  
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 18 AAAAAAAAAAAAAAAAAA 1

Db 20 AAAAAAAAAAAAAAAAAA 3

RESULT 606  
AAV34591  
ID AAV34591 standard; DNA; 20 BP.  
XX  
AC AAV34591;  
XX  
DT 25-AUG-1998 (first entry)  
XX  
DE M. vaccae antigenic sequence hybridising oligo AD12.  
XX  
KM Mycobacterium vaccae; antigen; therapy; prevention; cytokine production;  
KM M. avium; M. tuberculosis; immune response enhancer; cell proliferation;  
KM Mycobacteria infection; vaccine; cancer; ss.  
XX  
OS Synthetic.  
OS Mycobacterium vaccae.  
XX  
PN WO9808542-A2.  
XX  
PD 05-MAR-1998.  
XX  
PF 28-AUG-1997; 97WO-NZ000105.  
XX  
PR 29-AUG-1996; 96US-00705347.  
PR 12-JUN-1997; 97US-00873970.  
XX  
PA (GENE-) GENESIS RES & DEV CORP.  
XX  
PI Tan P, Hiyama J, Vissers E, Skinner MA, Scott LM, Prestidge RL;  
XX  
DR WPI; 1998-216926/19.  
XX  
PT Mycobacterium vaccae polypeptides - used to develop products for use in  
PT detection, therapy and prevention of mycobacteria infections or as immune  
PT response enhancers.  
XX  
PS Example 8; Page 99; 153pp; English.  
XX  
CC This oligonucleotide is used in the DNA cloning strategies of the  
CC Mycobacterium vaccae antigens. The invention provides M. vaccae  
CC polypeptides that comprise an immunogenic portion of a soluble M. vaccae  
CC antigen, or a variant, where the antigen induces an immune response in  
CC patients previously exposed to a mycobacterium. Such M. vaccae  
CC polypeptides can be used in methods for enhancing non-specific immune  
CC response. The methods and products can be used for the detection,  
CC treatment and prevention of infectious diseases caused by mycobacteria  
CC such as M. vaccae, M. avium or M. tuberculosis. The products also have  
CC the ability to induce cell proliferation and cytokine production (e.g.  
CC interferon-gamma and interleukin-12 production) in T cells, NK cells, B  
CC cells, or macrophages. They can be used for enhancing immune responses  
CC for use in vaccines or immunotherapy of infectious diseases and cancers  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAACTAAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 607  
AAV69670  
ID AAV69670 standard; DNA; 20 BP.  
XX  
AC AAV69670;  
XX  
DT 02-FEB-1999 (first entry)

XX PRPRY gene specific right primer.  
DE  
XX  
KM Non-recombining region; human; Y chromosome; testis; sperm;  
KM infertility; gene alteration; inhibitor; PRPRY; PCR primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9846747-A2.  
XX  
PD 22-OCT-1998.  
XX  
PF 10-APR-1998; 98WO-US007115.  
XX  
PR 11-APR-1997; 97US-0041877P.  
XX  
PA (WHEED ) WHITEHEAD INST BIOMEDICAL RES.  
XX  
PI Lahn BT, Page DC;  
XX  
DR WPI; 1998-568729/48.  
XX  
PT Novel genes in the non-combining region of Y chromosome - useful to  
PT diagnose if male infertility or reduced sperm count has a genetic basis.  
XX  
PS Example 2; Page 30; 54pp; English.  
XX  
CC Sequences AAV69651 to AAV69684 represent PCR primers used for  
CC localisation of the genes of the invention which occur on the non-  
CC recombining region of the human Y chromosome. The gene sequences fall  
CC into two classes: (1) X-homologous DNA which are expressed in many  
CC organs, having functional X homologues and (2) testis-specific DNA  
CC sequences. Y chromosomal DNA from males with known conditions such as  
CC infertility and reduced sperm count can be assessed using the invention  
CC to determine whether the condition is associated with or caused by the  
CC occurrence of the gene or gene alteration. Candidate inhibitors of the  
CC enzymatic activity of the genes can be assessed using in vitro assays  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 662 CTCGACTCCTCTGAC 679  
Db 1 CTCGACTGACCTCGAC 18

RESULT 608  
AAT86606/C  
ID AAT86606 standard; DNA; 20 BP.  
XX  
AC AAT86606;  
XX  
DT 04-JUN-1998 (first entry)  
XX  
DE Oligonucleotide separated by capillary affinity gel electrophoresis.  
DE Capillary affinity gel electrophoresis; separation; polymer-gel;  
KM polyacrylamide; ss.  
XX  
OS Synthetic.  
XX  
PN WO9745721-A1.  
XX  
PD 04-DEC-1997.  
XX  
PF 23-MAY-1997; 97WO-EP002647.  
XX  
PR 24-MAY-1996; 96CH-00001320.  
XX

PA (NOVS ) NOVARTIS AG.  
 XX  
 PI Muscate A, Paulus A, Nat F;  
 XX WPI; 1998-041763/04.  
 DR  
 XX Separation of electrically charged target molecules - by capillary  
 PT affinity gel electrophoresis using polymer-gel to which receptors for  
 PT target molecules are bound.  
 XX  
 PS Example D3; Page 25; 41pp; English.  
 XX  
 CC A mixture of oligonucleotides (AAT86604-7) were separated by a new  
 CC process using capillary affinity gel electrophoresis. The invention  
 CC relates to selective separation of electrically charged target molecules  
 CC in an analytical mixture. It comprises capillary affinity gel  
 CC electrophoresis using a capillary tube which is at least partly filled  
 CC with a polymer gel. Receptors for target molecules are covalently bound  
 CC to the polymer. An electric field of at least 50 volts/cm is applied. The  
 CC capillary tube is charged with the analytical mixture. In a first  
 CC separation stage, the target molecules in the mixture are bound to the  
 CC receptors and the remaining components are eluted, optionally whilst  
 CC splitting open. In a second stage, the elution conditions are changed,  
 CC optionally in stages, so that the affinity of the target molecules for  
 CC the receptor is eliminated and the target molecules are eluted and  
 CC detected, optionally whilst splitting open. The process is useful for  
 CC selective separation and/or determination of charged organic compounds,  
 CC such as oligonucleotides, peptides or carbohydrates. It may be used, e.g.  
 CC for isolation of specific proteins and DNA molecules, purification of  
 CC antibodies, analysis of antisense compounds or screening for enzyme  
 CC inhibitors. The process achieves higher resolution and selectivity than  
 CC prior art processes, especially in the case of complex biological  
 CC analytical mixtures. It has high sensitivity, even with small amounts of  
 CC samples. The derivatised polymers may be synthesised specifically using  
 CC standard methods  
 CC  
 XX  
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1520 AAAAAAAAAAGTAAAA 1537  
 Db 20 AAAAAAAAAAAAAAAAAA 3  
 RESULT 609  
 AAX27533/C  
 ID AAX27533 standard; RNA; 20 BP.  
 XX  
 AC AAX27533;  
 XX  
 DT 27-MAY-1999 (first entry)  
 XX  
 DE Synthetic RNA sequence produced by the method of the invention.  
 XX  
 KW silyloxymethyl; phosphonate; silyloxymethyl halide; diagnosis; ss;  
 KW cyanoethyl phosphoramidate coupling; isomerisation; steric hindrance.  
 XX  
 OS Synthetic.  
 OS  
 XX  
 PN WO9909044-A1.  
 XX  
 PD 25-FEB-1999.  
 XX  
 PF 17-AUG-1998; 98WO-EP005215.  
 XX  
 PR 18-AUG-1997; 97CH-00001931.  
 XX  
 PA (PITS/) PITSCH S.  
 PA (WEISS/) WEISS P A.  
 PA (JENN/) JENNY L.

XX  
 PI Pitsch S, Weiss PA, Jenny L;  
 XX WPI; 1999-180963/15.  
 DR  
 XX 2-silyloxymethyl ribonucleosides and their phosphonate derivatives - have  
 PT high purity, use in machine synthesis of ribonucleic acids, enable longer  
 PT oligonucleotide chain construction, and larger amounts.  
 XX  
 PS Example 6; Page 25; 38pp; English.  
 XX  
 CC The invention relates to silyloxymethyl protected D- or L-ribonucleosides  
 CC and their phosphonates (I), and silyloxymethyl halides (II). (I) are  
 CC intermediates for synthesis of RNA-oligonucleotides with predetermined  
 CC nucleotide sequence, particularly by machine synthesis. The groups  
 CC specified above, apart from those on silyl, are those particularly for  
 CC the cyanoethyl phosphoramidate coupling. Uses of the oligoribonucleotide  
 CC products in diagnosis, therapy, and as research tools, are well known,  
 CC and are not dealt with in detail. (II) is an intermediate for (I). The  
 CC silyloxymethyl halide reagent is easy to prepare, and yields are high.  
 CC Introduction of the silyloxymethyl group into the ribonucleoside is  
 CC simple and rapid, and the acetal bond formed does not migrate.  
 CC eliminating particularly the prior art problem of 2' to 3' isomerisation.  
 CC The methylenedioxy group spacer between the silyl group and nucleoside  
 CC ring results in less steric hindrance than bulky direct silyloxy  
 CC linkages, enabling first, a range of choices for the silyl substituents,  
 CC to provide, e.g., acid or base stability; and second, higher yields in  
 CC coupling. Purer products are therefore obtained than in prior art,  
 CC enabling larger quantities and longer chains of oligoribonucleotides to  
 CC be synthesised successfully, and in shorter times  
 CC  
 XX  
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 20 U; 0 Other;  
 Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1520 AAAAAAAAAAGTAAAA 1537  
 Db 20 AAAAAAAAAAAAAAAAAA 3  
 RESULT 610  
 AA211326  
 ID AA211326 standard; DNA; 20 BP.  
 XX  
 AC AA211326;  
 XX  
 DT 25-OCT-1999 (first entry)  
 XX  
 DE Mycobacterial 16S rRNA specific oligo AD12.  
 XX  
 KW Mycobacterium vaccae protein; antigen; T cell activation; cytokine;  
 KW dendritic cell maturation; infectious disease; immune disorder; cancer;  
 KW respiratory system; mycobacterial infection; allergy; tuberculosis;  
 KW leprosy; sarcoidosis; lung cancer; asthma; skin disorder; psoriasis;  
 KW dermatitis; eczema; alopecia areata; skin cancer; basal carcinoma;  
 KW squamous cell carcinoma; melanoma; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS  
 XX  
 PN Mycobacterium vaccae.  
 OS  
 XX  
 PD WO9932634-A2.  
 XX  
 PF 01-JUL-1999.  
 XX  
 PR 23-DEC-1998; 98WO-NZ000189.  
 XX  
 PR 23-DEC-1997; 97US-00996624.  
 PR 23-DEC-1997; 97US-00997080.  
 PR 23-DEC-1997; 97US-00997362.  
 PR 11-JUN-1998; 98US-00095855.  
 PR 17-SEP-1998; 98US-00156181.

```
PR 04-DEC-1998; 98US-00205426.
XX
XX (GENE-) GENESIS RES & DEV CORP LTD.
XX
XX Tan P, Watson J, Visser ES, Skinner MA, Prestidge RL;
XX WPI; 1999-430163/36.
XX
XX Enhancing immune response to an antigen.
XX
XX Example 15; Page 177; 243pp; English.
XX
XX The invention provides heat-killed Mycobacterium vaccae, or recombinant
XX M. vaccae proteins. The M. vaccae proteins may be employed to activate T
XX cells and natural killer cells, to stimulate the production of cytokines,
XX to enhance the expression of co-stimulatory molecules on dendritic cells,
XX and monocytes, and to enhance dendritic cell maturation and function. The
XX proteins can be expressed by standard recombinant methodology.
XX Pharmaceutical compositions comprising the proteins or nucleic acid
XX sequences encoding the proteins can be used for the treatment,
XX prevention, and detection of disorders including infectious diseases,
XX immune disorders and cancer. In particular, the compounds and methods are
XX used for treatment of diseases of the respiratory system, such as
XX mycobacterial infections, asthma, allergies, tuberculosis, leprosy,
XX sarcoidosis and lung cancers, and disorders of the skin such as
XX psoriasis, atopic dermatitis, eczema, allergic contact dermatitis,
XX alopecia areata, and skin cancers such as basal carcinoma, squamous cell
XX carcinoma and melanoma
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
DB 1 AAAAAAAAAAAAAAAAAA 18
RESULT 611
AAAA0449
ID AAAA0449 standard; DNA; 20 BP.
XX
XX AAAA0449;
AC
XX 13-NOV-2000 (first entry)
DT
XX Electrochemical detection method sample DNA target.
DE
XX Electrochemical detection; glucose; cholesterol; urea nitrogen;
KW bilirubin; uric acid; haemoglobin; lactic acid; body fluid; blood;
KW plasma; serum; urine; lymph diagnosis; ss.
XX
XX Synthetic.
OS
XX EPI018646-A2.
PN
XX 12-JUL-2000.
PD
XX 07-JAN-2000; 2000EP-00100126.
PE
XX 06-JAN-1999; 99JP-00001111.
PR 24-MAY-1999; 99JP-00143599.
XX
XX (FUJF ) FUJI PHOTO FILM CO LTD.
PA
XX Ogawa M, Takenaka S, Takagi M;
PI
XX WPI; 2000-444372/39.
XX
XX Quantitative analysis of a biochemical compound such as glucose, in body
XX a body fluid such as blood, comprising detecting enhanced electon
XX
```

```
PT transfer between an oxidase and a DNA-immobilized electrode, useful for
PT diagnosis of disease.
XX
XX Example 1; Page 8; 14pp; English.
XX
XX This invention describes a novel method for quantitatively analysing a
XX biochemical compound (I) which comprises contacting (I) with double
XX stranded DNA fixed to the surface of an electrode at their terminals in
XX which electrochemically active threading intercalators are intercalated,
XX in an aqueous medium under application of electric potential to the
XX electrode in the presence of an oxidase which oxidizes the biochemical
XX compound and becomes reduced, and detecting electric current flowing
XX between the electrode and a second electrode in the aqueous medium. The
XX method is useful for detection of biochemical compounds such as glucose,
XX cholesterol, urea nitrogen, bilirubin, uric acid, haemoglobin and lactic
XX acid in body fluids such as whole blood, plasma, serum, urine, and lymph
XX for diagnosis of various diseases. The method allows detection of
XX biochemical compounds quickly and easily with a high sensitivity using a
XX simple apparatus. This sequence represents DNA fragment used as a target
XX sample in the method of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
DB 1 AAAAAAAAAAAAAAAAAA 18
RESULT 612
AAAA0448/C
ID AAAA0448 standard; DNA; 20 BP.
XX
XX AAAA0448;
AC
XX 13-NOV-2000 (first entry)
DT
XX Electrochemical detection method fixed probe DNA.
DE
XX Electrochemical detection; glucose; cholesterol; urea nitrogen;
KW bilirubin; uric acid; haemoglobin; lactic acid; body fluid; blood;
KW plasma; serum; urine; lymph diagnosis; probe; ss.
XX
XX Synthetic.
OS
XX EPI018646-A2.
PN
XX 12-JUL-2000.
PD
XX 07-JAN-2000; 2000EP-00100126.
PE
XX 06-JAN-1999; 99JP-00001111.
PR 24-MAY-1999; 99JP-00143599.
XX
XX (FUJF ) FUJI PHOTO FILM CO LTD.
PA
XX Ogawa M, Takenaka S, Takagi M;
PI
XX WPI; 2000-444372/39.
XX
XX Quantitative analysis of a biochemical compound such as glucose, in body
XX a body fluid such as blood, comprising detecting enhanced electon
XX transfer between an oxidase and a DNA-immobilized electrode, useful for
XX diagnosis of disease.
XX
XX Example 1; Page 7; 14pp; English.
XX
XX This invention describes a novel method for quantitatively analysing a
XX biochemical compound (I) which comprises contacting (I) with double
XX stranded DNA fixed to the surface of an electrode at their terminals in
XX
```

CC which electrochemically active threading intercalators are intercalated,  
CC in an aqueous medium under application of electric potential to the  
CC electrode in the presence of an oxidase which oxidizes the biochemical  
CC compound and becomes reduced, and detecting electric current flowing  
CC between the electrode and a second electrode in the aqueous medium. The  
CC method is useful for detection of biochemical compounds such as glucose,  
CC cholesterol, urea nitrogen, bilirubin, uric acid, haemoglobin and lactic  
CC acid in body fluids such as whole blood, plasma, serum, urine, and lymph  
CC for diagnosis of various diseases. The method allows detection of  
CC biochemical compounds quickly and easily with a high sensitivity using a  
CC simple apparatus. This sequence represents DNA fragment used as fixed  
CC probe DNA in the method of the invention  
CC  
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 1520 AAAAAAAAAAGTAAAA 1537  
Db 20 AAAAAAAAAAAAAAAAAA 3  
RESULT 613  
AAA13752/C  
ID AAA13752 standard; DNA; 20 BP.  
XX  
AC AAA13752;  
XX  
DT 27-JUL-2000 (first entry)  
XX  
DE Stem cell factor universal oligonucleotide 220-3.  
XX  
KM Stem cell factor; SCF; haematopoietic progenitor cell; blood forming;  
KM primitive progenitor cell; haematopoietic disorder; syngeneic;  
KM allogeneic; autologous bone marrow transplant; gene therapy;  
KM transfection; haematopoietic stem cell; acute blood loss; neoplasia;  
KM cancer; ss.  
XX  
XX Synthetic.  
OS  
XX  
PN EP92579-A1.  
XX  
PD 12-APR-2000.  
XX  
PF 04-OCT-1990; 99EP-00122861.  
XX  
PR 16-OCT-1989; 89US-00422383.  
PR 11-JUN-1990; 90US-00537198.  
PR 24-AUG-1990; 90US-00573616.  
PR 28-SEP-1990; 90MO-US005548.  
PR 01-OCT-1990; 90US-00589701.  
PR 04-OCT-1990; 90EP-00310899.  
XX  
PA (AMGE-) AMGEN INC.  
XX  
PI Zeebo KM, Sugas SV, BosseImann RA, Martin FH;  
XX  
DR WPI; 2000-259135/23.  
XX  
PT Production of hematopoietic cells suitable for administration to a  
PT subject using progenitor cells and expanding the cells using stem cell  
PT factor.  
XX  
PS Example 3; Fig 12C; 123pp; English.  
XX  
CC A method has been developed of making haematopoietic cells suitable for  
CC administration to a subject. The method comprises: (a) obtaining the cells  
CC hematopoietic progenitor cells from a donor; and (b) expanding the cells  
CC by adding to the cells a haematopoietically effective dose of a  
CC polypeptide product having at least part of the primary structural  
CC confirmation and one or more of the biological properties of naturally

CC occurring stem cell factor (SCF). The method is useful for stimulating  
CC primitive progenitor cells including early haematopoietic progenitor  
CC cells which are capable of maturing to erythroid, megakaryocyte,  
CC granulocyte, lymphocyte and macrophage cells. SCF results in absolute  
CC increases in haematopoietic cells of both myeloid and lymphoid lineages.  
CC SCF is useful for treating haematopoietic disorders. The method is useful  
CC for expanding early haematopoietic progenitors in syngeneic, allogeneic  
CC or autologous bone marrow transplant. SCF is useful for enhancing the  
CC efficiency of gene therapy based on transfecting haematopoietic stem  
CC cells. SCF is also useful for combating the myelosuppressive effects of  
CC anti-HIV drugs such as AZT and for enhancing haematopoietic recovery  
CC after acute blood loss and as a boost to the immune system for fighting  
CC neoplasia (cancer). The present sequence represents a universal  
CC oligonucleotide which is used in an example from the present invention  
CC  
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 1520 AAAAAAAAAAGTAAAA 1537  
Db 18 AAAAAAAAAAAAAAAAAA 1  
RESULT 614  
AAA13754/C  
ID AAA13754 standard; DNA; 20 BP.  
XX  
AC AAA13754;  
XX  
DT 27-JUL-2000 (first entry)  
XX  
DE Stem cell factor universal oligonucleotide 220-11.  
XX  
KM Stem cell factor; SCF; haematopoietic progenitor cell; blood forming;  
KM primitive progenitor cell; haematopoietic disorder; syngeneic;  
KM allogeneic; autologous bone marrow transplant; gene therapy;  
KM transfection; haematopoietic stem cell; acute blood loss; neoplasia;  
KM cancer; ss.  
XX  
XX Synthetic.  
OS  
XX  
PN EP92579-A1.  
XX  
PD 12-APR-2000.  
XX  
PF 04-OCT-1990; 99EP-00122861.  
XX  
PR 16-OCT-1989; 89US-00422383.  
PR 11-JUN-1990; 90US-00537198.  
PR 24-AUG-1990; 90US-00573616.  
PR 28-SEP-1990; 90MO-US005548.  
PR 01-OCT-1990; 90US-00589701.  
PR 04-OCT-1990; 90EP-00310899.  
XX  
PA (AMGE-) AMGEN INC.  
XX  
PI Zeebo KM, Sugas SV, BosseImann RA, Martin FH;  
XX  
DR WPI; 2000-259135/23.  
XX  
PT Production of hematopoietic cells suitable for administration to a  
PT subject using progenitor cells and expanding the cells using stem cell  
PT factor.  
XX  
PS Example 3; Fig 12C; 123pp; English.  
XX  
CC A method has been developed of making haematopoietic cells suitable for  
CC administration to a subject. The method comprises: (a) obtaining the cells  
CC hematopoietic progenitor cells from a donor; and (b) expanding the cells  
CC by adding to the cells a haematopoietically effective dose of a



CC polypeptide product having at least part of the primary structural  
CC conformation and one or more of the biological properties of naturally  
CC occurring stem cell factor (SCF). The method is useful for stimulating  
CC primitive progenitor cells including early haematopoietic progenitor  
CC cells which are capable of maturing to erythroid, megakaryocyte,  
CC granulocyte, lymphocyte and macrophage cells. SCF results in absolute  
CC increases in haematopoietic cells of both myeloid and lymphoid lineages.  
CC SCF is useful for treating haematopoietic disorders. The method is useful  
CC for expanding early haematopoietic progenitors in syngeneic, allogeneic  
CC or autologous bone marrow transplant. SCF is useful for enhancing the  
CC efficiency of gene therapy based on transfecting haematopoietic stem  
CC cells. SCF is also useful for combating the myelosuppressive effects of  
CC anti-HIV drugs such as AZT and for enhancing haematopoietic recovery  
CC after acute blood loss and as a boost to the immune system for fighting  
CC neoplasia (cancer). The present sequence represents a universal  
CC oligonucleotide which is used in an example from the present invention

XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match	1.1%	Score 14.8	DB 1	Length 20
Best Local Similarity	88.9%	Pred. No. 4.4e+02		
Matches 16	Conservative	0	Mismatches 2	Indels 0
				Gaps 0

```

QY      1520 AAAAAAAAAAAGTAAA 1537
          |||||
Db      18  AAAAAAAAAAAAAAA 1

```

RESULT 615  
AAZ91117/c  
ID AAZ91117 standard; DNA; 20 BP.

AC	AAZ91117;
XX	
DT	06-JUN-2000 (first entry)

DE Oligonucleotide #5 for conjugation to abietane derivative.

**Ab** Abietane derivative; labelling; diagnostic test; biotin substitute; ss.

OS synchetic.

PN FR2781802-A1.

PD 04-FEB-2000.

31-JUL-1998; 98FR-00010084.

PR 31-JUL-1998; 98FR-00010084.

PA (INMR ) BIO MERIEUX.

PI Charles MH, Piga N, Battall PN, Veron L, Delair T, Mandrand B;

DR WPI; 2000-239603/21.

PT Saturated and unsaturated derivatives of abietic acid and their

PT diagnostics, chemical reactions and analysis.

PS Example 5; Page 20; 39pp; French.

The invention relates to novel saturated and unsaturated abietane derivatives. The new compounds may be used directly or indirectly in the development of new diagnostic tests, to follow infections, especially viral infections, to follow and/or measure chemical products, especially potential pollutants. In diagnostic tests they may be used as markers, or to form a universal solid phase after immobilization on a solid support, to produce monoclonal antibodies or polyclonal antibodies having diagnostic uses. The oligonucleotides A23113-29117 represent examples of sequences that can be labeled with the new abietane derivatives. The new derivatives may be used to substitute for biotin in diagnostic tests, but because they are not found naturally in humans the risk of potential

CC	interactions with biological molecules is eliminated
XX	
SO	Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match	1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity	88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative	0; Mismatches 0; Gaps 0

```

OY      1520 AAAAAAAAAAAGTAAA 1537
          |||||
Db      20  AAAAAAAAAAAAAAA 3

```

RESULT 616  
AAA50193/c  
ID AAA50193 standard; DNA; 20 BP

DT	07-NOV-2000	(first entry)
XX		
AC	AAA50193;	
DT		

DE 2'-Methoxyethoxy-modified oligonucleotide.

Phosphodiester oligonucleotide; H-phosphonate chemistry; ss-DNA

OS Synthetic

Key	Location/Qualifiers
200	
FH	

FT 24 24  
11044400-0000  
/ \*tag= a

XX :

XX	17
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2  
1

XX  
X  
U  
C  
S  
D  
C  
C  
C  
C  
C

[illegible]

XX  
XX

XX	1	1:54:02
XX	2	1:55:02

XX 2000 220400/ 22

For diagnostic tests, involves oxidation of H-phosphonate internucleosides

[illegible]

The present sequence is that of a phosphodiester oligonucleotide containing 20 nucleobases, 19 having a 2'-methoxyethoxy group on its 5', ribosyl sugar moiety. It is an example of an oligometric compound produced according to the methods of the invention. The invention provides compounds and methods for the preparation of mixed backbone oligomeric, or chimeric, compounds having phosphodiester internucleoside linkages in addition to phosphorothioate and/or phosphoramidate internucleoside linkages. The methods also include incorporation of boranophosphate internucleoside linkages. The methods utilize H-phosphonate intermediates that are coupled together, forming contiguous regions of 1 or more H-phosphonate internucleoside linkages. Each contiguous region is subsequently oxidized to phosphodiester, phosphorothioate, phosphoramidate or boranophosphate internucleoside linkages prior to further elongation. Mixed backbone oligometric compounds are prepared in this manner by oxidizing adjacent regions with different reagents. CC Oligomeric compounds of the invention are prepared using novel oxidation steps that oxidize a region of 1 or more H-phosphonate internucleoside linkages without degrading existing linkages that have been previously oxidized. The oligonucleotides obtained are useful as primers in PCR, probes, linkers, gene fragments and for other diagnostic tests on e.g. biological tissue, fluid, cells etc., as research reagents, and as

CC antiviral agents  
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
SQ Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
Db 20 AAAAAAAAAAAAAAAAAA 3  
RESULT 617  
AAC87238/c  
ID AAC87238 standard; DNA; 20 BP.  
AC AAC87238;  
XX  
DT 09-MAR-2001 (first entry)  
DE Phosphorothioate poly T oligonucleotide, SEQ ID NO:17.  
XX  
KW Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;  
KW immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;  
KW hnRNP A1; lupus Ia protein; functional modifier identification; agonist;  
KW antagonist; mimic; inhibitor; drug screening;  
KW cellular target identification; oligonucleotide optimisation;  
KW immunotherapy; ss.  
XX  
OS Synthetic.  
XX  
PN MO200067023-A1.  
XX  
PD 09-NOV-2000.  
XX  
PF 28-APR-2000; 2000WO-US011697.  
XX  
PR 29-APR-1999; 99US-0131830P.  
PR 03-MAR-2000; 2000US-0186845P.  
XX  
PA (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.  
PA (IOWA) UNIV IOWA RES FOUND.  
XX  
PI Noll BO, Schetter C, Krieg AM;  
PI WPI; 2001-016002/02.  
XX  
PT Immunostimulatory DNA binding proteins to identify immunostimulatory DNA  
PT functional modifiers, immunostimulatory DNA binding competitors and to  
PT optimize immunostimulatory oligodeoxynucleotides for stimulation.  
XX  
PS Example 1; Page 45; 95bp; English.  
XX  
CC The invention relates to the use of an immunostimulatory single-stranded  
CC DNA-binding protein in screening assays to identify compounds which bind  
CC to it and thereby act as functional modifiers of immunostimulatory  
CC oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity  
CC consist of immunostimulatory DNA binding inhibitors, immunostimulatory  
CC DNA mimics, and immunostimulatory DNA agonists and antagonists.  
CC Immunostimulatory DNA binding proteins can also be used in screening  
CC methods to identify immunostimulatory DNA binding competitors, and to  
CC optimize an immunostimulatory ODN for immune stimulation. Isolated  
CC complexes of an immunostimulatory DNA-binding protein bound to an  
CC immunostimulatory ODN can additionally be used to screen a panel of  
CC candidate target molecules to identify the cellular target molecules of  
CC the immunostimulatory ODN. The immunostimulatory DNA-binding proteins  
CC used in the methods of the invention are the RNA-binding proteins  
CC nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus Ia protein. The screening  
CC methods are useful for identifying a compound that inhibits interaction  
CC between immunostimulatory DNA and an immunostimulatory DNA-binding  
CC protein and for identifying agonists useful in immunotherapy. The complex  
CC is useful in screening for immunostimulatory DNA cellular target

CC molecules. The candidate immunostimulatory ODN competitors allow the  
CC investigation of structure/activity relationships of immunostimulatory  
CC DNA-binding proteins and immunostimulatory ODNs. The present sequence  
CC represents an oligonucleotide used in an exemplification of the invention  
XX  
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
Db 20 AAAAAAAAAAAAAAAAAA 3  
RESULT 618  
AAC87230/c  
ID AAC87230 standard; DNA; 20 BP.  
AC AAC87230;  
XX  
DT 09-MAR-2001 (first entry)  
DE Digoxigenin-labelled poly T oligonucleotide, SEQ ID NO:9.  
XX  
KW Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;  
KW immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;  
KW hnRNP A1; lupus Ia protein; functional modifier identification; agonist;  
KW antagonist; mimic; inhibitor; drug screening;  
KW cellular target identification; oligonucleotide optimisation;  
KW immunotherapy; ss.  
XX  
OS Synthetic.  
XX  
PN MO200067023-A1.  
XX  
PD 09-NOV-2000.  
XX  
PF 28-APR-2000; 2000WO-US011697.  
XX  
PR 29-APR-1999; 99US-0131830P.  
PR 03-MAR-2000; 2000US-0186845P.  
XX  
PA (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.  
PA (IOWA) UNIV IOWA RES FOUND.  
XX  
PI Noll BO, Schetter C, Krieg AM;  
PI WPI; 2001-016002/02.  
XX  
PT Immunostimulatory DNA binding proteins to identify immunostimulatory DNA  
PT functional modifiers, immunostimulatory DNA binding competitors and to  
PT optimize immunostimulatory oligodeoxynucleotides for stimulation.  
XX  
PS Example 1; Page 45; 95bp; English.  
XX  
CC The invention relates to the use of an immunostimulatory single-stranded  
CC DNA-binding protein in screening assays to identify compounds which bind  
CC to it and thereby act as functional modifiers of immunostimulatory  
CC oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity  
CC consist of immunostimulatory DNA binding inhibitors, immunostimulatory  
CC DNA mimics, and immunostimulatory DNA agonists and antagonists.  
CC Immunostimulatory DNA binding proteins can also be used in screening  
CC methods to identify immunostimulatory DNA binding competitors, and to  
CC optimize an immunostimulatory ODN for immune stimulation. Isolated  
CC complexes of an immunostimulatory DNA-binding protein bound to an  
CC immunostimulatory ODN can additionally be used to screen a panel of  
CC candidate target molecules to identify the cellular target molecules of  
CC the immunostimulatory ODN. The immunostimulatory DNA-binding proteins  
CC used in the methods of the invention are the RNA-binding proteins  
CC nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus Ia protein. The screening  
CC methods are useful for identifying a compound that inhibits interaction

CC between immunostimulatory DNA and an immunostimulatory DNA-binding  
CC protein and for identifying agonists useful in immunotherapy. The complex  
CC is useful in screening for immunostimulatory DNA cellular target  
CC molecules. The candidate immunostimulatory ODN competitors allow the  
CC investigation of structure/activity relationships of immunostimulatory  
CC DNA-binding proteins and immunostimulatory ODNs. The present sequence  
CC represents an oligonucleotide used in an exemplification of the invention

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
SQ

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
DB 20 AAAAAAAAAAAAAAAAAA 3

RESULT 619  
AAC87241/c  
ID AAC87241 standard; DNA; 20 BP.  
XX AAC87241;  
XX 09-MAR-2001 (first entry)  
XX  
XX Poly T oligonucleotide, SEQ ID NO:20.  
XX  
XX Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;  
XX immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;  
XX hnRNP A1; lupus La protein; functional modifier identification; agonist;  
XX antagonist; mimic; inhibitor; drug screening;  
XX cellular target identification; oligonucleotide optimisation;  
XX immunotherapy; ss.  
XX  
XX Synthetic.  
XX  
XX WO200067023-A1.  
XX  
XX 09-NOV-2000.  
XX  
XX 28-APR-2000; 2000WO-US011697.  
XX  
XX 29-APR-1999; 99US-0131830P.  
XX 03-MAR-2000; 2000US-0186845P.  
XX  
XX (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.  
XX (IOWA) UNIV IOWA RES FOUND.  
XX  
XX Noll BO, Schetter C, Krieg AM;  
XX  
XX WPI; 2001-016002/02.  
XX  
XX Immunostimulatory DNA binding proteins to identify immunostimulatory DNA  
XX functional modifiers, immunostimulatory DNA binding competitors and to  
XX optimize immunostimulatory oligodeoxynucleotides for stimulation.  
XX  
XX Example 1; Page 45; 95pp; English.

CC The invention relates to the use of an immunostimulatory single-stranded  
CC DNA-binding protein in screening assays to identify compounds which bind  
CC to it and thereby act as functional modifiers of immunostimulatory  
CC oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity  
CC consist of immunostimulatory DNA binding inhibitors, immunostimulatory  
CC DNA mimics, and immunostimulatory DNA agonists and antagonists.  
CC Immunostimulatory DNA-binding proteins can also be used in screening  
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CC optimize an immunostimulatory ODN for immune stimulation. Isolated  
CC complexes of an immunostimulatory DNA-binding protein bound to an  
CC immunostimulatory ODN can additionally be used to screen a panel of  
CC candidate target molecules to identify the cellular target molecules of  
CC the immunostimulatory ODN. The immunostimulatory DNA-binding proteins

CC used in the methods of the invention are the RNA-binding proteins  
CC nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus La protein. The screening  
CC method is useful for identifying a compound that inhibits interaction  
CC between immunostimulatory DNA and an immunostimulatory DNA-binding  
CC protein and for identifying agonists useful in immunotherapy. The complex  
CC is useful in screening for immunostimulatory DNA cellular target  
CC molecules. The candidate immunostimulatory ODN competitors allow the  
CC investigation of structure/activity relationships of immunostimulatory  
CC DNA-binding proteins and immunostimulatory ODNs. The present sequence  
CC represents an oligonucleotide used in an exemplification of the invention

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
SQ

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
DB 20 AAAAAAAAAAAAAAAAAA 3

RESULT 620  
AAS10402/c  
ID AAS10402 standard; DNA; 20 BP.  
XX AAS10402;  
XX  
XX 24-OCT-2001 (first entry)  
XX  
XX DNA template for 3' end labeling of an RNA molecule, #14.  
XX  
XX 3' RNA end labeling; DNA template; Okazaki fragment; 5' overhang; ss.  
XX  
XX Synthetic.  
XX  
XX US6238865-B1.  
XX  
XX 29-MAY-2001.  
XX  
XX 16-OCT-1998; 98US-00173936.  
XX  
XX 17-OCT-1997; 97US-0063757P.  
XX  
XX (CHEN/) CHEN G.  
XX (HUAN/) HUANG Z.  
XX (SZOS/) SZOSTAK J W.  
XX  
XX Huang Z, Szostak JW;  
XX  
XX WPI; 2001-366470/38.  
XX  
XX Modifying a 3' terminus of a pre-selected DNA sequence, useful for  
XX labeling and modifying 3'-termini of other nucleic acids, comprises using  
XX a synthetic nucleotide template with a defined overhang nucleotide.  
XX  
XX Example 5; Col 13; 22pp; English.

CC The sequence represents a synthetic DNA template molecule used to  
CC demonstrate the method of the invention. The invention relates to a  
CC method of modifying (e.g. 3' end labelling with 32P dATP) the 3' terminus  
CC of an RNA molecule by providing a DNA oligonucleotide, complementary to  
CC the 3' end of the RNA molecule, with an overhang at the 5' end which  
CC allows incorporation of the labeling nucleotide into the RNA molecule.  
CC The method, based on the synthesis of Okazaki fragments, is useful for  
CC labeling and modifying the 3'-termini of other nucleic acids such as DNA  
CC fragments. The method is a simple and efficient way of labeling or  
CC modifying RNA 3'-termini using DNA polymerase and a synthetic template  
CC with defined overhang nucleotides

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
SQ

Query Match 1.1%; Score 14.8; DB 1; Length 20;

```
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAA 1537
   |||||
Db 20 AAAAAAAAAAAAAAAAAA 3

RESULT 621
AADI6997/c
ID AADI6997 standard; DNA; 20 BP.
XX
AC AADI6997;
XX
DT 29-NOV-2001 (first entry)
XX
DE Capture probe CP5'.
XX
KM Scaffold protein; antibody mimic; fibronectin type III domain;
KM randomised loop; randomised beta-sheet; diagnostic purpose;
KM protein designing; probe; tenth module of human Fn3; 10Fn3;
KM fibronectin module of type III; Fn3; ss.
XX
OS Unidentified.
XX
FN WO200164942-A1.
XX
PD 07-SEP-2001.
XX
PF 28-FEB-2001; 2001WO-US006414.
XX
PR 29-FEB-2000; 2000US-00515260.
XX
PA (PHYL-) PHYLIS INC.
XX
PI Lipovsek D, Wagner RM, Kuimelis RG;
XX
DR WPI; 2001-557782/62.
XX
PT Fibronectin scaffold protein array for obtaining a protein/compound which
PT binds to a compound/protein, comprises a fibronectin type III domain
PT having a randomized loop, a randomized beta-sheet or their combination.
XX
PS Disclosure; Page 41; 67pp; English.
XX
CC The present invention relates to an array of proteins (antibody mimics)
CC comprising a fibronectin type III domain having a randomised loop, a
CC randomised beta-sheet, or their combination, and has the capacity to bind
CC to a compound that is not bound by a corresponding naturally-occurring
CC fibronectin, immobilised onto a solid support. The antibody mimics is
CC useful for detecting a compound preferably a protein, in a biological
CC sample. It is also useful to detect one or more different analytes
CC simultaneously in a sample. Hence is useful for diagnostic purposes. It
CC is also useful for the purpose of designing proteins capable of binding
CC to virtually any compound of interest. The present sequence is a capture
CC probe used to self-assemble and anchor the tenth module of human
CC fibronectin module of type III (Fn3) (10Fn3) which is used in an
CC exemplification of the invention
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAA 1537
   |||||
Db 20 AAAAAAAAAAAAAAAAAA 3

RESULT 622
AAF44607/c
ID AAF44607 standard; DNA; 20 BP.
```

```
XX AAF44607;
AC
XX 27-MAR-2001 (first entry)
DT
XX
DE Novel mouse protein kinase EST 5' primer.
XX
KM Mouse; protein kinase; antiarthritic; antisclerotic; immunosuppressive;
KM cardiac; renal; antiinflammatory; antiasthmatic; osteopathic;
KM dermatological; antidiabetic; antifertility; gene therapy; vaccine;
KM immune disorder; cardiovascular disease; neurodegenerative disease;
KM cancer; autoimmune disorder; stroke; inflammatory bowel disease;
KM inflammatory pelvic disease; multiple sclerosis; psoriasis; primer; ss.
XX
OS Mus musculus.
XX
FN WO200073469-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US014842.
XX
PR 28-MAY-1999; 99US-0136503P.
XX
PA (SUGEN-) SUGEN INC.
XX
PI Plowman GD, Martinez R, Whyte D, Sudersanam S;
XX
DR WPI; 2001-032161/04.
XX
PT Nucleic acids encoding kinase polypeptides, useful for diagnosing and
PT treating immune-related diseases and disorders, cardiovascular disease,
PT neurodegenerative diseases and/or cancers.
XX
PS Example 1; Page 106; 310pp; English.
XX
CC The present sequence was used to isolate nucleic acid molecules encoding
CC novel protein kinases. The nucleic acids and the proteins they encode may
CC be used in the treatment and diagnosis of diseases associated with
CC inappropriate kinase expression such as immune-related diseases and/or
CC disorders, cardiovascular disease, neurodegenerative diseases and/or
CC cancers. The nucleic acids and complementary sequences may also be used
CC as DNA probes in diagnostic assays. The kinase polypeptides may be used
CC as antigens in the production of antibodies of kinase expression and
CC activity. Anti-kinase antibodies and kinase antagonists may also be used
CC to down regulate kinase expression and activity. Diseases related to
CC atherosclerosis, autoimmune disorders, complications of organ
CC transplantation, myocardial infarction, immune disorders,
CC cardiomyopathies, strokes, renal failure, oxidative-stress related
CC disorders, chronic inflammatory bowel disease, chronic inflammatory
CC pelvic disease, multiple sclerosis, asthma, osteoarthritis, psoriasis,
CC rhinitis, autoimmunity, diabetes, cancers and reproductive disorders
XX
SQ Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 698 CTGTGAATGAGTCGCG 715
   |||||
Db 20 CTGTGAATGAGTCGCG 3

RESULT 623
AAF60896
ID AAF60896 standard; DNA; 20 BP.
XX
AC AAF60896;
XX
DT 15-MAY-2001 (first entry)
XX
```

DE Conjugate forming oligonucleotide ON5 SEQ ID 5.  
XX  
XX Transport; membrane; cytostatic; virucide; vasotropic; dermatological;  
KM antipneumatic; antistatic; gene therapy; tumor cell; antisense;  
KM tumor therapy; drug; phosphodiester linkage; ss.  
XX  
XX Unidentified.  
OS  
PN DE19935302-A1.  
XX  
XX 08-FEB-2001.  
PD  
XX 28-JUL-1999; 99DE-01035302.  
PF  
XX 28-JUL-1999; 99DE-01035302.  
PR  
XX 28-JUL-1999; 99DE-01035302.  
PS (AVET ) AVENTIS PHARMA DEUT GMBH.  
PI Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;  
XX WPI: 2001-203679/21.  
DR  
XX  
XX New substituted aryl conjugates of parent molecules, especially  
PT oligonucleotides, having improved transmembrane and intracellular  
PT transport properties, useful as medicaments or diagnostic agents.  
XX  
XX Disclosure; Page 9; 28pp; German.  
PS  
XX  
XX This invention describes a novel conjugate (I) which consists of (A) a  
CC molecule to be transported and (B) at least one aryl residue of formula -  
CC Ar-(X-C(Y)-R<sub>1</sub>)<sub>n</sub> (II). Ar = group containing at least one aromatic ring;  
CC X = O or N (aicy); Y = O, S or NH-R<sub>2</sub> (aicy); R<sub>1</sub> = optionally substituted  
CC 1-23C alkyl (optionally containing double and/or triple bonds); R<sub>2</sub> =  
CC optionally substituted 1-18C alkyl (optionally containing double and/or  
CC triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or  
CC via a chemical group, provided that the chemical group is other than CH<sub>2</sub>-  
CC -S if the bond is via a phosphodiester linkage of (A). The invention also  
CC describes (i) the preparation of a conjugate (I') of (A') a molecule to  
CC be transported and (B') at least one aryl residue (not restricted to  
CC (II)'), by preparing (A') containing a reactive function at the position  
CC at which (B') is to be bonded, preparing (B') and reacting (A') and (B');  
CC and (ii) the use of aryl groups (II) (optionally bonded via a chemical  
CC group) for transporting (A) across biological membranes. The products of  
CC the invention have cytostatic, virucide, vasotropic, dermatological,  
CC antipneumatic and antistatic activity and can be used for gene  
CC therapy. Conjugation of (A) with (B) is useful for transporting (A)  
CC across biological membranes or into eukaryotic or prokaryotic cells  
CC (specifically bacterial, yeast or mammalian cells, including human cells,  
CC particularly tumor cells). Medicaments, diagnostic agents and test kits  
CC containing (I) are also claimed. Typically (I) are antisense  
CC oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for  
CC treating viral infections or diseases associated with integrins or cell-  
CC cell interactions (e.g. resectosis, vitiligo, psoriasis or asthma); or  
CC labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ  
CC hybridization. Conjugation with (B) markedly improves the cellular uptake  
CC of (A), e.g. in tumor cells. (B) include fluorescently labeled residues,  
CC in which case the conjugates (I) are fluorescently labeled, allowing  
CC microscopic monitoring of cellular uptake etc. The cellular uptake of (I)  
CC is superior to that obtained using other conjugated groups related to  
CC (II); e.g. oligonucleotides conjugated with fluorescent diacetate (within  
CC the scope of (B)) have superior uptake to corresponding fluorescein  
CC conjugates  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1520 AAAAAAAAAAGTAAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAA 18

RESULT 624  
AAS63428  
ID AAS63428 standard; DNA; 20 BP.  
XX  
XX AAS63428;  
AC  
XX  
XX 29-JAN-2002 (first entry)  
DT  
XX  
XX Oligonucleotide-nanoparticle probe #52.  
DE  
XX  
XX Oligonucleotide-nanoparticle probe; diagnostic; forensic analysis;  
KM nucleic acid detection; nanostructure; biochip; biofilter; drug delivery;  
KM ss.  
XX  
XX Synthetic.  
OS  
XX WO200173123-A2.  
PN  
XX 04-OCT-2001.  
PD  
XX  
XX 28-MAR-2001; 2001WO-US010071.  
PF  
XX  
XX 28-MAR-2000; 2000US-0192699P.  
PR 26-APR-2000; 2000US-0200161P.  
PR 26-JUN-2000; 2000US-00603830.  
PR 26-JUN-2000; 2000US-0213906P.  
PR 08-DEC-2000; 2000US-0254392P.  
PR 11-DEC-2000; 2000US-0255235P.  
PR 12-JAN-2001; 2001US-00760500.  
PR 28-MAR-2001; 2001US-00820279.  
XX  
XX (NANO-) NANOSPHERE INC.  
PA  
XX  
XX Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JU, Elghanian R;  
PI Taton TA, Park S, Li Z;  
XX WPI: 2001-656926/75.  
DR  
XX  
XX Detecting and separating nucleic acid, useful e.g. for diagnosis,  
PT comprises reaction with nanoparticles that carry oligonucleotides  
PT complementary to parts of the target.  
XX  
XX Example 18; Page 158; 40pp; English.  
PS  
XX  
XX The invention relates to a method for detection of nucleic acid (I)  
CC having at least 2 portions, comprising treatment with nanoparticles that  
CC carry oligonucleotides complementary to at least 2 parts of (I), where  
CC detectable change caused by hybridisation of the oligonucleotide to (I)  
CC is observed. The method is used to detect (or to separate) specific (I),  
CC e.g. for diagnosing a wide variety of diseases, sequencing, in forensic  
CC analysis etc., and generally to detect analytes other than (I). The  
CC oligonucleotide-derivatised nanoparticles are also useful for preparing  
CC nanostructures useful, for example, as biochips, biofilters, mechanical  
CC devices, separation membranes, chemical sensors, in computers, and for  
CC drug delivery. Very stable nanoparticle-oligonucleotide conjugates can be  
CC produced, allowing their direct use (as probes) in polymerase chain  
CC reaction, i.e. they survive multiple heating/cooling cycles so do not  
CC need to be added after amplification. (I) are detected by simple colour  
CC change, without the need for special equipment, making possible rapid  
CC field testing for e.g. pathogens. AAS63374-AAS63448 represent  
CC oligonucleotide-nanoparticle probes, and related sequences, used in the  
CC method of the invention  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1520 AAAAAAAAAAGTAAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAA 18

```

RESULT 625
AAF28481
ID AAF28481 standard; DNA; 20 BP.
XX
XX AAF28481;
AC
XX
XX 03-APR-2001 (first entry)
XX
DE Random oligonucleotide, SEQ ID NO: 53.
XX
XX Nucleic acid detection; nanoparticle-oligonucleotide conjugate;
KM disease diagnosis; forensic analysis; DNA sequencing; paternity testing;
KM cell line authentication; gene therapy; ss.
XX
XX Synthetic.
OS
XX WO200100876-A1.
XX
XX 04-JAN-2001.
XX
XX 26-JUN-2000; 2000WO-US017507.
XX
XX 25-JUN-1999; 99US-00344667.
XX
XX 26-APR-2000; 2000US-0200161P.
XX
XX (MIRK/) MIRKIN C A.
PA (LETS/) LETSINGER R L.
PA (MUCI/) MUCIC R C.
PA (STOR/) STORHOFF J J.
PA (ELGH/) ELGHANIAN R.
PA (TATO/) TATON T A.
XX
PI Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JJ, Elghanian R;
PI Taton TA;
XX
XX WPI; 2001-061976/07.
XX
XX Detecting nucleic acid, useful for e.g. diagnosis of diseases, forensics
PT and DNA sequencing, comprises observing detectable change brought about
PT by hybridization of nucleic acid with substrate or particle bound
PT oligonucleotides.
XX
XX
XX Disclosure; Page 199; 205pp; English.
XX
CC The present sequence is an oligonucleotide used in a method for detecting
CC a nucleic acid having at least 2 portions. The method comprises
CC hybridising the nucleic acid with oligonucleotides, such as the present
CC sequence, attached to a substrate and/or particle and detecting a change
CC in colour, conductivity or optical density. The method is useful for the
CC diagnosis and/or monitoring of diseases, in forensics, in DNA sequencing,
CC for paternity testing, for cell line authentication and for monitoring
CC gene therapy. Detecting nucleic acids based upon observing a colour
CC change is cheap, fast, simple, and does not require specialised or
CC expensive equipment. The nanoparticle oligonucleotide conjugates remain
CC stable for at least 6 months. A single base mismatch and as little as 20
CC femtomoles (fM) of target can be detected using the conjugates
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAA 1537
|||||
DB 1 AAAAAAAAAAAAAAAAA 18

```

```

XX
XX AAS10371;
AC
XX
XX 24-OCT-2001 (first entry)
XX
XX Oligonucleotide-cyclic disulphide linker, d.
DE
XX Nanoparticle; cyclic disulphide-oligonucleotide; DNA detection;
KM DNA isolation; genetic disease; bacterial disease; viral disease;
KM forensic science; paternity testing; gene therapy; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH 1
FT misc_feature
FT /*tag= a
FT /note= "A is covalently linked to a cyclic-disulphide
FT moiety"
FT
XX
XX WO200151665-A2.
XX
XX 19-JUL-2001.
XX
XX 12-JAN-2001; 2001WO-US001190.
XX
XX 13-JAN-2000; 2000US-0176409P.
XX
XX 26-APR-2000; 2000US-0200161P.
XX
XX 26-JUN-2000; 2000US-00603830.
XX
XX 12-JAN-2001; 2001US-00760500.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JJ, Elghanian R;
PI Taton TA, Li Z;
XX
XX WPI; 2001-451868/48.
XX
XX Detecting a nucleic acid useful in e.g. diagnosing genetic, bacterial or
PT viral diseases, by contacting the nucleic acid with oligonucleotides
PT attached to nanoparticles and having sequences complementary a portion of
PT the nucleic acid.
XX
XX Example 24; Fig 44; 323pp; English.
XX
XX The sequence represents a cyclic disulphide linked oligonucleotide which
CC may be coupled with colloidal gold particles (nanoparticles) and used to
CC demonstrate the method of the invention. The invention relates to
CC isolating or detecting a nucleic acid of interest, in a mixture of
CC nucleic acids, by binding it to 2 or more complementary nucleotides which
CC have a nanoparticle attached to their 5' ends. The nanoparticles (e.g.
CC colloidal gold) are used to both isolate and detect (e.g. by linking the
CC particle to a fluorescent probe) the resultant complex. The methods are
CC useful for detecting nucleic acids, natural or synthetic, and modified or
CC unmodified. The methods may also be applied in the diagnosis of genetic,
CC bacterial and viral diseases, in forensics, in DNA sequencing, for
CC paternity testing, for cell line authentication, and for monitoring gene
CC therapy. The methods are further useful in research and analytical
CC laboratories in DNA sequencing, in the field to detect the presence of
CC specific pathogens, for quick identification of an infection to assist in
CC drug prescription, and in homes and health centres for inexpensive first-
CC line screening. The methods, which are based on observing colour change
CC with the naked eye, are cheap, fast, simple, robust (reagents are
CC stable), do not require specialised or expensive equipment, and little or
CC no instrumentation is required
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAA 1537
|||||

```

DB 1 AAAAAAAAAAAAAAAAAA 18

RESULT 627  
AAF99427/c  
ID AAF99427 standard; DNA; 20 BP.  
XX  
XX AAF99427;  
AC  
XX 12-JUN-2001 (first entry)  
DT  
XX  
XX Immunostimulatory nucleic acid #543.  
DE  
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
KW immunostimulatory; tumour; viral infection; bacterial infection;  
KW fungal infection; parasitic infection; cancer; asthma;  
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.  
XX  
XX Synthetic.  
OS  
XX WO200122972-A2.  
PN  
XX 05-APR-2001.  
PD  
XX 25-SEP-2000; 2000WO-US026383.  
PF  
XX 25-SEP-1999; 99US-0156113P.  
PR 27-SEP-1999; 99US-0156135P.  
PR 23-AUG-2000; 2000US-0227436P.  
XX  
XX (IOWA ) UNIV IOWA RES FOUND.  
PA (COLE-) COLEY PHARM GMBH.  
XX  
XX Krieg AM, Schetter C, Vollmer J;  
PI  
XX WPI; 2001-273485/28.  
DR  
XX  
XX Vaccinating against tumors, infectious diseases, allergies and asthma  
PT using immunostimulatory Py-rich and TG nucleic acids.  
PT  
XX  
XX Claim 101; Page 49; 338pp; English.  
PS  
XX  
XX The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC streptococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
CC  
XX  
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAA 1537  
DB 20 AAAAAAAAAAAAAAAAAA 3

RESULT 628  
AAF99099/c  
ID AAF99099 standard; DNA; 20 BP.  
XX  
XX AAF99099;  
AC

XX  
DT 12-JUN-2001 (first entry)  
XX  
XX Immunostimulatory nucleic acid #215.  
DE  
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
KW immunostimulatory; tumour; viral infection; bacterial infection;  
KW fungal infection; parasitic infection; cancer; asthma;  
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.  
XX  
XX Synthetic.  
OS  
XX WO200122972-A2.  
PN  
XX 05-APR-2001.  
PD  
XX 25-SEP-2000; 2000WO-US026383.  
PF  
XX 25-SEP-1999; 99US-0156113P.  
PR 27-SEP-1999; 99US-0156135P.  
PR 23-AUG-2000; 2000US-0227436P.  
XX  
XX (IOWA ) UNIV IOWA RES FOUND.  
PA (COLE-) COLEY PHARM GMBH.  
XX  
XX Krieg AM, Schetter C, Vollmer J;  
PI  
XX WPI; 2001-273485/28.  
DR  
XX  
XX Vaccinating against tumors, infectious diseases, allergies and asthma  
PT using immunostimulatory Py-rich and TG nucleic acids.  
PT  
XX  
XX Claim 101; Page 42; 338pp; English.  
PS  
XX  
XX The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC streptococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
CC  
XX  
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAA 1537  
DB 20 AAAAAAAAAAAAAAAAAA 3

RESULT 629  
AAF99431  
ID AAF99431 standard; DNA; 20 BP.  
XX  
XX AAF99431;  
AC  
XX  
XX 12-JUN-2001 (first entry)  
DT  
XX  
XX Immunostimulatory nucleic acid #547.  
DE  
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
KW immunostimulatory; tumour; viral infection; bacterial infection;  
KW fungal infection; parasitic infection; cancer; asthma;

```
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX Synthetic.
OS
XX WO200122972-A2.
PN
XX 05-APR-2001.
PD
XX 25-SEP-2000; 2000WO-US026383.
PF
XX 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156113P.
PR 23-AUG-2000; 2000US-0227436P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
PA (COLB-) COLEY PHARM GMBH.
XX
PI Kriegl AM, Schetter C, Vollmer J;
XX WPI; 2001-273485/28.
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Claim 101; Page 49; 338pp; English.
XX
XX The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC hemophilus, campylobacter, clostridium, Escherichia coli and/or
CC streptococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC T12 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAAGTAAA 1537
DB 1 AAAAAAAAAAAAAAAAAA 18
RESULT 630
AAH41331/c
ID AAH41331 standard; DNA; 20 BP.
XX
AC AAH41331;
XX
XX 21-AUG-2001 (first entry)
DT
XX Universal stem cell factor (SCF) related oligonucleotide SEQ ID NO:32.
DE
XX Stem cell factor; SCF; stem cell factor receptor; blood cell disorder;
KM gene therapy; PCR primer; mutagenesis; probe; ss.
XX
OS Synthetic.
XX
XX US6207454-B1.
PN
XX 27-MAR-2001.
PD
XX 31-DEC-1998; 98US-00224681.
PF
XX
```

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PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449653.
PR 12-JAN-1998; 98US-00005893.
XX
XX (AMGE-) AMGEN INC.
PA
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
PI
XX WPI; 2001-366062/38.
XX
XX Enhancing efficiency of transfer of polynucleotide into a target
PT mammalian cell in vitro, involves exposing cell that expresses a stem
PT cell factor receptor to stem cell factor, and introducing polynucleotide
PT into cell in vitro.
XX
XX Example 3; Fig 12C; 210pp; English.
PS
XX The present invention describes a method for enhancing (E) the efficiency
CC of transfer of a polynucleotide (I) into a target mammalian cell (II) in
CC vitro, comprising exposing (II) that expresses a stem cell factor (SCF)
CC receptor to a biologically active SCF, its analogue or fragment, which
CC induces cell proliferation, and introducing (I) to (II) in vitro.
CC Exposure of SCF to (II) results in increased uptake of (I) into the cell.
CC The method is useful for enhancing the efficiency of the transfer of a
CC polynucleotide into a target mammalian cell in vitro. The method is
CC useful in gene therapy techniques. AAH41301 to AAH41364 and AAB98351 to
CC AAB98390 represent sequences used in the exemplification of the present
CC invention
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAAGTAAA 1537
DB 18 AAAAAAAAAAAAAAAAAA 1
RESULT 631
AAH41333/c
ID AAH41333 standard; DNA; 20 BP.
XX
AC AAH41333;
XX
XX 21-AUG-2001 (first entry)
DT
XX Universal stem cell factor (SCF) related oligonucleotide SEQ ID NO:34.
DE
XX Stem cell factor; SCF; stem cell factor receptor; blood cell disorder;
KM gene therapy; PCR primer; mutagenesis; probe; ss.
XX
OS Synthetic.
XX
XX US6207454-B1.
PN
XX 27-MAR-2001.
PD
XX 31-DEC-1998; 98US-00224681.
PF
XX 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449653.
PR 12-JAN-1998; 98US-00005893.
XX
```



```
PR 12-JAN-1998; 98US-00005893.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zeebo KM, Besselman RA, Suggs SV, Martin FH;
XX WPI; 2001-366062/38.
DR
XX Enhancing efficiency of transfer of polynucleotide into a target
PT mammalian cell in vitro. Involves exposing cell that expresses a stem
PT cell factor receptor to stem cell factor, and introducing polynucleotide
PT into cell in vitro.
XX
XX Example 3; Fig 12C; 210pp; English.
XX
XX The present invention describes a method for enhancing (B) the efficiency
CC of transfer of a polynucleotide (I) into a target mammalian cell (II) in
CC vitro, comprising exposing (II) that expresses a stem cell factor (SCF)
CC receptor to a biologically active SCF, its analogue or fragment, which
CC induces cell proliferation, and introducing (I) to (II) in vitro.
CC Exposure of SCF to (II) results in increased uptake of (I) into the cell.
CC The method is useful for enhancing the efficiency of the transfer of a
CC polynucleotide into a target mammalian cell in vitro. The method is
CC useful in gene therapy techniques. AAH41301 to AAH41364 and AAB98351 to
CC AAB98390 represent sequences used in the exemplification of the present
CC invention.
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 632
AAH46465/C
ID AAH46465 standard; DNA; 20 BP.
XX
XX AAH46465;
AC
XX 14-SEP-2001 (first entry)
XX
XX Oligonucleotide #13.
XX
XX Phosphorothioate; anti-viral therapy; stereochemical pathway; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "All bases are phosphorothioate"
FT modified_base 1
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Modified with 2'-O-methyl"
XX
XX US6242591-B1.
FN
XX
XX 05-JUN-2001.
PD
XX 11-JAN-2000; 2000US-00481486.
PP
XX 15-OCT-1997; 97US-00950779.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Cole DL, Ravikumar VT, Cheruvallath ZS;
PI
```

```
XX
XX WPI; 2001-407218/43.
DR
XX
XX Preparing sulfurized 2' substituted phosphorothioate oligonucleotides
PT useful in biological research, comprises phosphorylating the 5'-hydroxyl
PT of a nucleic acid having a nucleoside with a 2' modification.
XX
XX Example 23; Col 11; 7pp; English.
XX
XX The present invention relates to a method for preparing phosphorothioate
CC oligonucleotides having at least one nucleoside with a 2' modification.
CC The method comprises phosphorylating the 5'-hydroxyl of a nucleic acid
CC group having at least one nucleoside with a 2' modification in an
CC acetonitrile. The present sequence was used to illustrate the method of
CC the present invention. The method is useful for synthesizing sulphurised
CC 2' substituted phosphorothioate oligonucleotides, which may be used in
CC molecular biological research, in applications such as anti-viral
CC therapy, and for determining the stereochemical pathways of certain
CC enzymes which recognise nucleic acids
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 20 AAAAAAAAAAAAAAAAAA 3
RESULT 633
AAH78547
ID AAH78547 standard; cDNA; 20 BP.
XX
XX AAH78547;
AC
XX 10-DEC-2001 (first entry)
XX
XX Nucleotide sequence of a cDNA sequence.
XX
XX Nucleic acid identification; DNA library screening; ss.
XX
XX Synthetic.
OS
XX
XX US6274321-B1.
FN
XX 14-AUG-2001.
PD
XX 03-DEC-1999; 99US-00454704.
PE
XX 03-DEC-1999; 99US-00454704.
PR
XX 03-DEC-1999; 99US-00454704.
XX
XX (REGC ) UNIV CALIFORNIA.
PA
XX
XX Blumberg B;
PI
XX WPI; 2001-588900/66.
DR
XX
XX Screening nucleic acids (NA) in pool of interest comprises pooling,
PT expressing NA to form expression product pool and identifying NA in NA
PT pool corresponding to expression product pool having interaction with
PT target moiety.
XX
XX Disclosure; Col 22; 19pp; English.
XX
XX The specification describes a method for identifying a nucleic acid in a
CC pool of interest. The method comprises pooling individually identifiable
CC nucleic acids into at least two pools of one nucleic acid each,
CC expressing nucleic acid pools to obtain protein expression product pools;
CC assaying protein expression product pools for products having interaction
CC with target molecule; selecting nucleic acid pools corresponding to
CC identified protein expression product pools; and identifying individual
```

CC nucleic acids in identified nucleic acid pools. The method is useful for  
 CC identifying a nucleic acid (e.g. cDNA) in a pool of interest and for  
 CC functionally screening several nucleic acids. The method is also useful  
 CC for screening genomic DNA libraries or other source of individual cDNAs,  
 CC mRNA, synthetic libraries of nucleic acids e.g. combinatorial libraries.  
 CC The present sequence was used in the course of the invention

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAA 1537  
 DB 1 AAAAAAAAAAAAAAAAAA 18

RESULT 634  
 AAF28351  
 ID AAF28351 standard; DNA; 20 BP.

XX AAF28351;  
 XX 02-APR-2001 (first entry)  
 XX DNA oligomer #1.

XX Deoxynucleic S-methylthiouracil; Dmmt; antisense therapy;  
 KM cardiovascular disease; inflammatory disease; neurocellular disease;  
 KM antiviral therapy; human immunodeficiency virus; human-cytomegalovirus;  
 KM influenza; herpes; infection; ss.

XX Unidentified.

XX US6163176-B1.

XX 02-JAN-2001.

XX 28-SEP-1999; 99US-00407675.

XX 02-JUL-1998; 98US-0091481P.

XX 11-DEC-1998; 98US-0111800P.

XX 02-JUL-1999; 99US-00347443.

XX (REGC ) UNIV CALIFORNIA.

XX Dev AP, Bruce TC;

XX WPI; 2001-122276/13.

XX Preparing novel deoxynucleic alkyl thiouracil oligonucleotide for use in  
 PT antisense therapy, by synthesizing oligonucleotides comprising backbone  
 PT of alkyl or alkoxy thiouracil linkages in solution or on solid phase.

XX Example 7; Fig 16; 48pp; English.

XX The present sequence was used to demonstrate the ability of deoxynucleic  
 CC S-methylthiouracil (Dmmt) compounds to form triplets with DNA oligomers. An  
 CC increase in the C content of the oligos resulted in a large decrease in  
 CC binding. This experiment was performed as an example of a method for  
 CC preparing oligonucleotides comprising a backbone of alkyl or alkoxy  
 CC thiouracil linkages. The method is useful for preparing oligonucleotides  
 CC for use in antisense or antisense therapy, to inhibit production of  
 CC proteins associated with genetic diseases, cardiovascular, inflammatory  
 CC and neurocellular diseases, and for antiviral therapy, e.g. to treat  
 CC human immunodeficiency virus, human-cytomegalovirus, influenza and herpes  
 CC infections. The compounds are also useful as diagnostic reagents to  
 CC detect the presence or absence of the target DNA or RNA sequences to  
 CC which they specifically bind and by antagonising the normal biological  
 CC activity of a target protein, they can be used in the manipulation of  
 CC tissue e.g. tissue differentiation, both in vivo and in ex vivo tissue  
 CC cultures. The method provides an efficient and rapid solid-phase method

CC for the synthesis of thiouracil and S-methylthiouracil  
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

QY 1520 AAAAAAAAAAGTAAA 1537  
 DB 1 AAAAAAAAAAAAAAAAAA 18

RESULT 635  
 AAS04113/C  
 ID AAS04113 standard; DNA; 20 BP.

XX AAS04113;  
 XX 29-AUG-2001 (first entry)

XX Human SCF (stem cell factor) cDNA universal PCR primer 220-11.

XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;  
 KM blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;  
 KM anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;  
 KM PCR primer; ss.

XX Homo sapiens.

XX US6207417-B1.

XX 27-MAR-2001.

XX 07-JUN-1995; 95US-00482918.

XX 16-OCT-1989; 89US-00422283.

XX 11-JUN-1990; 90US-00537198.

XX 24-AUG-1990; 90US-00573616.

XX 01-OCT-1990; 90US-00589701.

XX 21-DEC-1993; 93US-00172329.

XX (ZSEB/) ZSEBO K M.

XX (BOSS/) BOSSSELMAN R A.

XX (SUGG/) SUGGS S V.

XX (MART/) MARTIN F H.

XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;

XX WPI; 2001-298941/31.

XX Novel nucleic acids encoding stem cell factor useful for treating

PT disorders involving blood cells, e.g. leukemia, splenomegaly, Hodgkin's

PT disease, Kala azar, anemia and septicemia.

XX Example 3; Fig 12C; 209pp; English.

XX The present sequence for universal PCR primer 220-11 is 1 of 8 universal  
 CC oligonucleotides (AAS04110-AAS04117) used in the isolation of the human  
 CC SCF (stem cell factor) cDNA sequence. The present invention relates to  
 CC novel stem cell factors (AAU02453-AAU02456, AAU02460, AAU02461) and the  
 CC polynucleotides encoding them. SCF stimulate primitive progenitor cells  
 CC including early haematopoietic progenitor cells. The invention also  
 CC describes SCF peptides (AAU02462-AAU02481) and the oligonucleotides  
 CC (AAS04081-AAS04117) used in the isolation of human and rat SCF sequences.  
 CC The polynucleotide encoding SCF is useful for producing SCF and useful in  
 CC gene therapy. It is useful for treating disorders involving blood cells  
 CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple  
 CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,  
 CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,  
 CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12  
 CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation  
 CC disorders such as piebaldism and vitiligo

```
XX SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 1520 AAAAAAAAAAGTAAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 636
AAS04111/c
ID AAS04111 standard; DNA; 20 BP.
XX AC AAS04111;
XX DT 29-AUG-2001 (first entry)
XX DE Human SCF (stem cell factor) cDNA universal PCR primer 220-3.
XX KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
XX KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
XX KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN US6207417-B1.
XX PD 27-MAR-2001.
XX PE 07-JUN-1995; 95US-00482918.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 21-DEC-1993; 93US-00172329.
XX PA (ZSEB/) ZSEBO K M.
XX PA (BOSS/) BOSSSELMAN R A.
XX PA (SUGS/) SUGS S V.
XX PA (MART/) MARTIN F H.
XX PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX DR WPI; 2001-298941/31.
XX PT Novel nucleic acids encoding stem cell factor useful for treating
XX PT disorders involving blood cells, e.g. leukaemia, splenomegaly, Hodgkin's
XX PT disease, Kala azar, anaemia and septicemia.
XX PS Example 3; Fig 12C; 209pp; English.
XX CC The present sequence for universal PCR primer 220-3 is 1 of 8 universal
XX CC oligonucleotides (AAS04110-AAS04117) used in the isolation of the human
XX CC SCF (stem cell factor) cDNA sequence. The present invention relates to
XX CC novel stem cell factors (AAU02453-AAU02458, AAU02460, AAU02461) and the
XX CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
XX CC including early haematopoietic progenitor cells. The invention also
XX CC describes SCF peptides (AAU02462-AAU02481) and the oligonucleotides
XX CC (AAS04081-AAS04117) used in the isolation of human and rat SCF sequences.
XX CC The polynucleotide encoding SCF is useful for producing SCF and useful in
XX CC gene therapy. It is useful for treating disorders involving blood cells
XX CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
XX CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
XX CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
XX CC disseminated fungus disease, fulminating septicemia, malaria, vitamin B12
XX CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
XX CC disorders such as prebaldism and vitiligo
```

```
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 1520 AAAAAAAAAAGTAAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 637
AAF89091/c
ID AAF89091 standard; DNA; 20 BP.
XX AC AAF89091;
XX DT 13-JUN-2001 (first entry)
XX DE Mammalian stem cell factor PCR primer SEQ ID NO: 32.
XX KW Human; rat; mammal; stem cell factor; SCF; cell growth stimulation;
XX KW gene therapy; haematopoietic disorder; aplastic anaemia; leukaemia;
XX KW neurological damage; intestinal damage; infertility; AIDS; SCID;
XX KW severe combined immunodeficiency; PCR primer; ss.
XX OS Mammalia.
XX PN US6207802-B1.
XX PD 27-MAR-2001.
XX PE 09-NOV-1994; 94US-00336728.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 25-NOV-1992; 92US-00982255.
XX PA (AMGE-) AMGEN INC.
XX PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX DR WPI; 2001-353108/37.
XX PT Novel isolated non-human mammalian stem cell factor polypeptide
XX PT stimulating growth of early hematopoietic progenitor cells, useful for
XX PT treating aplastic anemia, lymphoma, Letterer-Siwe disease, Kala azar,
XX PT sarcoidosis.
XX PS Example 3; Fig 12C; 209pp; English.
XX CC The present invention provides the protein and coding sequences of
XX CC mammalian stem cell factors (SCFs). These are capable of stimulating the
XX CC growth of early haematopoietic progenitor cells, neural stem cells and
XX CC primordial germ stem cells. The sequences are useful in the treatment of
XX CC leukaemia, haematopoietic disorders, aplastic anaemia, paroxysmal
XX CC nocturnal haemoglobinuria, malaria, pigmentaion disorders, neurological
XX CC and intestinal damage, infertility, AIDS and severe combined
XX CC immunodeficiency (SCID). The present sequence is primer used to amplify
XX CC an SCF in the exemplification of the invention
XX SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 1520 AAAAAAAAAAGTAAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
```

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RESULT 638
AAH23889/c
ID AAH23889 standard; DNA; 20 BP.
XX
AC AAH23889;
XX
DT 13-JUL-2001 (first entry)
XX
DE Mammalian stem cell factor PCR primer SEQ ID NO: 34.
XX
KW Human; rat; mammal; stem cell factor; SCF; cell growth stimulation;
KW gene therapy; haematopoietic disorder; aplastic anaemia; leukaemia;
KW neurological damage; intestinal damage; infertility; AIDS; SCID;
KW severe combined immunodeficiency; PCR primer; ss.
XX
OS Mammalia.
XX
PN US6207802-B1.
XX
PD 27-MAR-2001.
XX
PF 09-NOV-1994; 94US-00336728.
XX
PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 25-NOV-1992; 92US-00982255.
XX
XX (AMGE-) AMGEN INC.
XX
PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX
DR WPI; 2001-353108/37.
XX
PT Novel isolated non-human mammalian stem cell factor polypeptide
PT stimulating growth of early hematopoietic progenitor cells, useful for
PT treating aplastic anemia, lymphoma, Letterer-Siwe disease, Kala azar,
PT sarcoidosis.
XX
XX Example 3; Fig 12C; 209pp; English.
XX
PS The present invention provides the protein and coding sequences of
PS mammalian stem cell factors (SCFs). These are capable of stimulating the
PS growth of early haematopoietic progenitor cells, neural stem cells and
PS primordial germ stem cells. The sequences are useful in the treatment of
PS leukaemia, haematopoietic disorders, aplastic anaemia, paroxysmal
PS nocturnal haemoglobinuria, malaria, pigmentation disorders, neurological
PS and intestinal damage, infertility, AIDS and severe combined
PS immunodeficiency (SCID). The present sequence is primer used to amplify
PS an SCF in the exemplification of the invention
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1520 AAAAAAAAAAAGTAAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 639
AAH23889/c
ID AAH23889 standard; DNA; 20 BP.
XX
AC AAH23889;
XX
DT 07-AUG-2001 (first entry)
XX
DE Human SCF (stem cell factor) cDNA universal PCR primer 220-3.
XX

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```

XX
KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
PN US6204363-B1.
XX
PD 20-MAR-2001.
XX
PF 25-NOV-1992; 92US-00982255.
XX
PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
XX
XX (AMGE-) AMGEN INC.
XX
PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX
DR WPI; 2001-256683/26.
XX
PT New stem cell factor polypeptides and their analogs which stimulate
PT growth of early hematopoietic progenitors, useful for treating aplastic
PT anemia, carcinoma, multiple myeloma, vitiligo, Kala azar, Hodgkin's
PT disease.
XX
XX Example 3; Fig 12C; 166pp; English.
XX
PS The present sequence for universal PCR primer 220-3 is 1 of 8 universal
PS oligonucleotides (AAH23888-AAH23895) used in the isolation of the human
PS SCF (stem cell factor) cDNA sequence. The present invention relates to
PS novel stem cell factors (AAB73561-AAH73566, AAB73571-AAH73576) and the
PS polynucleotides encoding them. SCF stimulate primitive progenitor cells
PS including early haematopoietic progenitor cells. The invention also
PS describes SCF peptides (AAB73578-AAH73597) and the oligonucleotides
PS (AAH23859-AAH23887) used in the isolation of human and rat SCF sequences.
PS The polynucleotide encoding SCF is useful for producing SCF and useful in
PS gene therapy. It is useful for treating disorders involving blood cells
PS such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
PS myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
PS congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
PS disseminated fungus disease, Fulminating septicemia, malaria, vitamin
PS B12 and folic acid deficiency, pyridoxine deficiency, and
PS hypopigmentation disorders such as vitiligo and vitiligo
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1520 AAAAAAAAAAAGTAAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 640
AAH23891/c
ID AAH23891 standard; DNA; 20 BP.
XX
AC AAH23891;
XX
DT 07-AUG-2001 (first entry)
XX
DE Human SCF (stem cell factor) cDNA universal PCR primer 220-11.
XX
KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW

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KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
XX PCR primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN US6204363-B1.
XX
XX PD 20-MAR-2001.
XX
XX PF 25-NOV-1992; 92US-00982255.
XX
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 10-APR-1991; 91US-00684535.
XX
XX PA (AMGE-) AMGEN INC.
XX
XX PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2001-256683/26.
XX
XX PT New stem cell factor polypeptides and their analogs which stimulate
XX growth of early hematopoietic progenitors, useful for treating aplastic
XX anemia, carcinoma, multiple myeloma, vitiligo, kala azar, Hodgkin's
XX disease.
XX
XX PS Example 3; Fig 12C; 166bp; English.
XX
XX SQ The present sequence for universal PCR primer 220-11 is 1 of 8 universal
XX oligonucleotides (AAH23888-AAH23895) used in the isolation of the human
XX SCF (stem cell factor) cDNA sequence. The present invention relates to
XX novel stem cell factors (AAH73561-AAH73568, AAH73571-AAH73576) and the
XX polynucleotides encoding them. SCF stimulate primitive progenitor cells
XX including early haematopoietic progenitor cells. The invention also
XX describes SCF peptides (AAH73578-AAH73597) and the oligonucleotides
XX (AAH23859-AAH23887) used in the isolation of human and rat SCF sequences.
XX The polynucleotide encoding SCF is useful for producing SCF and useful in
XX gene therapy. It is useful for treating disorders involving blood cells
XX such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
XX myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
XX congenitive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
XX disseminated fungus disease, Pulminating septicemia, malaria, vitamin
XX B12 and folic acid deficiency, pyridoxine deficiency, and
XX hypopigmentation disorders such as piebaldism and vitiligo
XX
XX SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4.4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX ||||||| |||
XX Db 18 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 641
XX AAS04214/c
XX ID AAS04214 standard; DNA; 20 BP.
XX
XX AC AAS04214;
XX
XX DT 29-AUG-2001 (first entry)
XX
XX DE Human SCF (stem cell factor) cDNA universal PCR primer 220-11.
XX
XX KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
XX blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
XX anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
XX PCR primer; ss.
XX

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OS Homo sapiens.
XX
XX PN US6218148-B1.
XX
XX PD 17-APR-2001.
XX
XX PF 21-DEC-1993; 93US-00172329.
XX
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 25-NOV-1992; 92US-00982255.
XX
XX PA (AMGE-) AMGEN INC.
XX
XX PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2001-281051/29.
XX
XX PT Isolated DNA sequence, encoding polypeptide product useful for
XX stimulating growth of early hematopoietic progenitor cells.
XX
XX PS Example 3; Fig 12C; 167bp; English.
XX
XX SQ The present sequence for universal PCR primer 220-11 is 1 of 8 universal
XX oligonucleotides (AAS04211-AAS04218) used in the isolation of the human
XX SCF (stem cell factor) cDNA sequence. The present invention relates to
XX novel stem cell factors (AAU02761-AAU02767, AAU02770-AAU02775, AAU02797)
XX and the polynucleotides encoding them. SCF stimulate primitive progenitor
XX cells including early haematopoietic progenitor cells. The invention also
XX describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides
XX (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.
XX The polynucleotide encoding SCF is useful for producing SCF and useful in
XX gene therapy. It is useful for treating disorders involving blood cells
XX such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
XX myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
XX congenitive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
XX disseminated fungus disease, Pulminating septicemia, malaria, vitamin B12
XX and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
XX disorders such as piebaldism and vitiligo
XX
XX SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4.4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX ||||||| |||
XX Db 18 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 642
XX AAS04212/c
XX ID AAS04212 standard; DNA; 20 BP.
XX
XX AC AAS04212;
XX
XX DT 29-AUG-2001 (first entry)
XX
XX DE Human SCF (stem cell factor) cDNA universal PCR primer 220-3.
XX
XX KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
XX blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
XX anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
XX PCR primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN US6218148-B1.
XX
XX PD 17-APR-2001.
XX

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XX PF 21-DEC-1993; 93US-00172329.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 25-NOV-1992; 92US-00982255.
XX PA (AMGE-) AMGEN INC.
XX PI Zeebo KM, Bosseiman RA, Suggs SV, Martin FH;
XX DR WPI; 2001-281051/29.
XX PT Isolated DNA sequence, encoding polypeptide product useful for
XX PT stimulating growth of early hematopoietic progenitor cells.
XX PS Example 3; Fig 12C; 167pp; English.
XX CC The present sequence for universal PCR primer 220-3 is 1 of 8 universal
XX CC oligonucleotides (AAS04211-AAS04218) used in the isolation of the human
XX CC SCF (stem cell factor) cDNA sequence. The present invention relates to
XX CC novel stem cell factors (AAU02761-AAU02767, AAU02770-AAU02775, AAU02797)
XX CC and the polynucleotides encoding them. SCF stimulate primitive progenitor
XX CC cells including early haematopoietic progenitor cells. The invention also
XX CC describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides
XX CC (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.
XX CC The polynucleotide encoding SCF is useful for producing SCF and useful in
XX CC gene therapy. It is useful for treating disorders involving blood cells
XX CC such as myelofibrosis, metastatic carcinoma, acute leukemia, multiple
XX CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
XX CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
XX CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
XX CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
XX CC disorders such as prebaldism and vitiligo
XX SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4.4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX DB |||||
XX 18 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 643
XX AAF87713/C
XX ID AAF87713 standard; DNA; 20 BP.
XX AC
XX XX AAF87713;
XX XX
XX XX 06-JUN-2001 (first entry)
XX XX
XX XX Human glutathione S-transferase pi promoter (GSTPI) PCR primer N-F1.
XX KM Human; glutathione S-transferase pi; GSTPI; Cpg island; diagnosis;
XX KW hepatic cell proliferative disorder; liver cancer; anticancer;
XX KM tumorigenesis; detection; PCR primer; ss.
XX OS
XX XX Homo sapiens.
XX XX
XX XX WO200126536-A2.
XX PN
XX XX
XX XX 19-APR-2001.
XX PD
XX PF 12-OCT-2000; 2000WO-US028427.
XX XX
XX PR 13-OCT-1999; 99US-0159168P.
XX XX
XX XX (UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.

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XX XX Nelson WG, Lin X, Tchou JC, Bakker J;
XX PI WPI; 2001-290647/30.
XX DR
XX XX
XX PT Detecting hepatic cell proliferative disorder useful for detecting
XX PT hepatocellular carcinoma comprises detecting a methylated Cpg-containing
XX PT glutathione-S-transferase nucleic acid.
XX PS Claim 83; Page 42; 64pp; English.
XX XX
XX CC The present invention describes a method for detecting hepatic cell
XX CC proliferative disorders. The method comprises detecting a methylated Cpg-
XX CC containing glutathione-S-transferase (GST) nucleic acid (1) in a hepatic
XX CC specimen or a biological fluid, where a methylated GST nucleic acid is
XX CC indicative of a hepatic cell proliferative disorder. The method can be
XX CC used to diagnose hepatocellular carcinoma, and to monitor progress of its
XX CC treatment. Increasing the level of GST is useful in the treatment of
XX CC liver cancer, in humans or animals. The method can detect the early
XX CC stages of tumorigenesis in liver cells simply. The present sequence
XX CC represents a PCR primer which is used in the amplification of the human
XX CC glutathione S-transferase pi gene (GSTPI) promoter in an example from the
XX CC present invention for mapping genomic GSTPI Cpg island DNA
XX CC hypermethylation changes by genomic sequencing after bisulfite treatment
XX XX
XX SQ Sequence 20 BP; 4 A; 0 C; 2 G; 14 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4.4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1518 TTAATAAAAAAAAAAGTAA 1535
XX DB |||||
XX 19 TTAATAAAAAAAAAATTAA 2
XX
XX RESULT 644
XX AAS10447/C
XX ID AAS10447 standard; DNA; 20 BP.
XX AC
XX XX AAS10447;
XX XX
XX XX 24-OCT-2001 (first entry)
XX XX
XX XX Human stem cell factor (SCF) cDNA universal PCR primer 220-3.
XX DE
XX KM Human; stem cell factor; SCF; haematopoietic progenitor cell;
XX KW blood disorder; Hodgkin's disease; vitamin B12; folic acid deficiency;
XX KM hypopigmentation disorder; viral disorder; AIDS; PCR primer; ss.
XX XX
XX XX Homo sapiens.
XX OS
XX XX US6248319-B1.
XX PN
XX XX 19-JUN-2001.
XX PD
XX PF 24-MAY-1995; 95US-00449653.
XX XX
XX XX 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 10-APR-1991; 91US-00684535.
XX PR 25-NOV-1992; 92US-00982255.
XX PR 21-DEC-1993; 93US-00172329.
XX XX
XX XX (ZSEB/) ZSEBO K M.
XX PA (BOSS/) BOSSEIMAN R A.
XX PA (SUGG/) SUGGS S V.
XX PA (MART/) MARTIN F H.
XX XX
XX XX Zeebo KM, Bosseiman RA, Suggs SV, Martin FH;
XX PI
XX XX

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DR WPI; 2001-407312/43.
XX Increasing the number of early hematopoietic progenitor cells in the
PT peripheral blood useful for the treatment of blood disorders including
PT Hodgkin's disease comprises the administration of human stem cell factor.
XX
XX Example 3; Fig 12C; 210pp; English.
XX
CC The present sequence for universal PCR primer 220-3 is 1 of 19 PCR
CC primers (AAS10435-AAS10453) used to amplify various portions of the human
CC SCF cDNA sequence. The sequence is described in an invention relating to
CC novel stem cell factors, the polynucleotides encoding them and methods
CC for producing the stem cell factors. The methods involve increasing the
CC number of early haematopoietic progenitor cells in human peripheral blood
CC by administering a haematopoietically effective human stem cell factor
CC polypeptide. The methods are useful for the treatment of blood disorders,
CC including myelofibrosis, myelocleiosis, osteopetrosis, metastatic
CC carcinoma, acute leukaemia, multiple myeloma, Hodgkin's disease,
CC lymphoma, Gaucher's disease, Niemann-Pick disease, refractory anaemia,
CC malaria, vitamin B12 and folic acid deficiency, hypopigmentation
CC disorders i.e. piebaldism and viral induced disorders, including AIDS
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAAA 1537
DB 18 AAAAAAAAAAAAAAAAAA 1
RESULT 645
AAS10449/C
ID AAS10449 standard; DNA; 20 BP.
XX
AC AAS10449;
XX
DT 24-OCT-2001 (first entry)
XX
DE Human stem cell factor (SCF) cDNA universal PCR primer 220-11.
XX
KW Human; stem cell factor; SCF; haematopoietic progenitor cell;
KW blood disorder; Hodgkin's disease; vitamin B12; folic acid deficiency;
KW hypopigmentation disorder; viral disorder; AIDS; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN US6248319-B1.
XX
PD 19-JUN-2001.
XX
PF 24-MAY-1995; 95US-00449653.
XX
PR 16-OCT-1989; 88US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
XX
PA (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
PI Zsebo KM, Bosselman RA, Sugge SV, Martin FH;
XX WPI; 2001-407312/43.
XX
PT Increasing the number of early hematopoietic progenitor cells in the

```

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PT peripheral blood useful for the treatment of blood disorders including
PT Hodgkin's disease comprises the administration of human stem cell factor.
XX
XX Example 3; Fig 12C; 210pp; English.
XX
CC The present sequence for universal PCR primer 220-11 is 1 of 19 PCR
CC primers (AAS10435-AAS10453) used to amplify various portions of the human
CC SCF cDNA sequence. The sequence is described in an invention relating to
CC novel stem cell factors, the polynucleotides encoding them and methods
CC for producing the stem cell factors. The methods involve increasing the
CC number of early haematopoietic progenitor cells in human peripheral blood
CC by administering a haematopoietically effective human stem cell factor
CC polypeptide. The methods are useful for the treatment of blood disorders,
CC including myelofibrosis, myelocleiosis, osteopetrosis, metastatic
CC carcinoma, acute leukaemia, multiple myeloma, Hodgkin's disease,
CC lymphoma, Gaucher's disease, Niemann-Pick disease, refractory anaemia,
CC malaria, vitamin B12 and folic acid deficiency, hypopigmentation
CC disorders i.e. piebaldism and viral induced disorders, including AIDS
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1520 AAAAAAAAAAGTAAA 1537
DB 18 AAAAAAAAAAAAAAAAAA 1
RESULT 646
AAF23717
ID AAF23717 standard; DNA; 20 BP.
XX
AC AAF23717;
XX
DT 27-MAR-2001 (first entry)
XX
DE Human PPARgamma antisense oligonucleotide ISIS 106035.
XX
KW Cytostatic; antiinflammatory; antisense oligonucleotide; PPARgamma;
KW peroxisome proliferator-activated receptor gamma; transcription factor;
KW nuclear hormone receptor; human; infection; inflammation; tumour;
KW phosphorochiater; 2-methoxyethyl wing; ss.
XX
OS Homo sapiens.
XX
PN US6159734-A.
XX
PD 12-DEC-2000.
XX
PF 18-JAN-2000; 2000US-00484345.
XX
PR 18-JAN-2000; 2000US-00484345.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI McKay R, Baker BF, Borchers AH;
XX WPI; 2001-070112/08.
XX
PT Novel antisense compounds capable of modulating expression of peroxisome
PT proliferator-activated receptor gamma useful for diagnosis, prophylaxis
PT and treatment of diseases associated with expression of the receptor.
XX
XX Example 15; Col 43-44; 40pp; English.
XX
CC Peroxisome proliferator-activated receptors (PPARs) are members of the
CC nuclear hormone receptor subfamily of transcription factors. The present
CC invention relates to antisense oligonucleotides, targeted to a nucleic
CC acid molecule encoding human PPARgamma, which specifically hybridises
CC with and inhibits the expression of human PPARgamma. The present sequence
CC is one such antisense oligonucleotide. The oligonucleotides of the

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Db 20 AAAAAAAAAAAAAAAAAA 3

RESULT 649  
ABST78076  
ID ABST78076 standard; DNA; 20 BP.  
XX  
XX  
AC ABST78076;  
XX  
XX  
DT 13-DEC-2002 (first entry)  
XX  
XX  
DE Angiogenesis inhibitory oligonucleotide #560.  
XX  
XX  
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;  
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;  
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;  
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;  
KW rubecosis; Osler-Weber Syndrome; myocardial angiogenesis;  
KW plaque neovascularization; telangiectasia; haemophilic joint;  
KW angiodiroma; wound granulation; intestinal adhesion; atherosclerosis;  
KW scleroderma; hypertrophic scar.  
XX  
XX  
OS Synthetic.  
XX  
XX  
PN WO200253141-A2.  
XX  
XX  
PD 11-JUL-2002.  
XX  
XX  
PF 14-DEC-2001; 2001WO-US048458.  
XX  
XX  
PR 14-DEC-2000; 2000US-0255534P.  
XX  
XX  
PA (COLE-) COLEY PHARM GROUP INC.  
XX  
XX  
PI Bratzler RL;  
XX  
XX  
DR WPI; 2002-566690/60.  
XX  
XX  
PT Inhibiting angiogenesis in a subject, involves administering at least one  
PT antiangiogenic nucleic acid molecule to the subject.  
XX  
XX  
PS Claim 2; Page 29; 276pp; English.  
XX  
XX  
CC The invention relates to inhibiting angiogenesis in a subject, comprising  
CC administering at least one antiangiogenic nucleic acid molecule. Also  
CC included is a kit comprising a first container housing the antiangiogenic  
CC nucleic acids, and instructions for administering them to a subject  
CC having a condition characterised by unwanted angiogenesis. The method is  
CC useful for inhibiting angiogenesis associated with solid tumour growth,  
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,  
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,  
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,  
CC rubecosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque  
CC neovascularization, telangiectasia, haemophilic joints, angiodiroma,  
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and  
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic  
CC acid of the invention  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 650  
ABN84731/C  
ID ABN84731 standard; DNA; 20 BP.  
XX

AC ABN84731;  
XX  
XX  
DT 05-NOV-2002 (first entry)  
XX  
XX  
DE Oligonucleotide 9, binds specifically to verotoxin type 2 RNA.  
XX  
XX  
KW Verotoxin; VT2; primer; detection; diagnosis; ss.  
XX  
XX  
OS Escherichia coli.  
XX  
XX  
PN EP1236806-A2.  
XX  
XX  
PD 04-SEP-2002.  
XX  
XX  
PF 04-MAR-2002; 2002EP-00004879.  
XX  
XX  
PR 02-MAR-2001; 2001JP-00058143.  
XX  
XX  
PA (TOYU) TOSOH CORP.  
XX  
XX  
PI Maruyama T, Ishiguro T, Taya T,  
XX  
XX  
DR WPI; 2002-593050/64.  
XX  
XX  
PT An oligonucleotide for detection or amplification of VT1 and VT2 RNA for  
PT detecting Verotoxin.  
XX  
XX  
PS Claim 2; Page 16; 36pp; English.  
XX  
XX  
XX  
CC The present sequence is an oligonucleotide that binds specifically to  
CC verotoxin type 2 (VT2) RNA. The 5' end of the oligonucleotide binds at  
CC position 365 of VT2 RNA. The oligonucleotide is used in a claimed process  
CC of detecting VT2 RNA, in which: a specific sequence of VT2 RNA in a  
CC sample is used as a template for cDNA synthesis using an RNA-dependent  
CC DNA polymerase; the RNA of the formed RNA/DNA hybrid is digested with  
CC ribonuclease H; the resulting single-stranded DNA is used as a template  
CC for production of a double-stranded DNA having a promoter sequence  
CC capable of transcribing RNA comprising the specific sequence or a  
CC sequence complementary to it employing a DNA-dependent DNA polymerase  
CC which produces an RNA transcription product in the presence of an RNA  
CC polymerase; and the RNA transcription product is then used as a template  
CC for cDNA synthesis employing the RNA-dependent DNA polymerase, the  
CC amplification process being characterized by using a first  
CC oligonucleotide capable of specifically binding to VT2 RNA, such as the  
CC present sequence, and a second oligonucleotide (see ABN84742-46), where  
CC either the first or second oligonucleotide includes the RNA polymerase  
CC promoter sequence at the 5' end. The process is used in detection of VT in  
CC clinical examinations, public health examinations, food evaluations, and  
CC food poisoning examinations. The oligonucleotide can be used as a gene  
CC diagnosing reagent for cleaving, amplifying (preferably using a constant  
CC temperature nucleic acid amplification method) and detecting RNA or DNA,  
CC and is useful e.g. as a reagent for quantifying or diagnosing VT  
XX  
SQ Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 831 ATCAGCGCGTGTGAC 848  
Db 20 ATCAGCGCGTGTGACC 3

RESULT 651  
ABL39402/C  
ID ABL39402 standard; DNA; 20 BP.  
XX  
XX  
AC ABL39402;  
XX  
XX  
DT 16-APR-2002 (first entry)  
XX  
XX  
DE Immunostimulatory nucleic acid SEQ ID NO: 838.

```
XX XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KW angio genesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
XX PN WO200197843-A2.
XX PD 27-DEC-2001.
XX PF 22-JUN-2001; 2001WO-US020154.
XX PR 22-JUN-2000; 2000US-0213346P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PI Weiner G, Hartmann G;
XX WI; 2002-154611/20.
XX XX Treating or preventing cancer, such as basal cell carcinoma, comprises
PT administering immunostimulatory nucleic acids that induce expression of
PT cell surface antigens and antibodies to a subject having or at risk of
PT developing cancer.
XX PS Disclosure; Page 309; 312pp; English.
XX CC The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for
CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
Db 20 AAAAAAAAAAAAAAAAAA 3
RESULT 652
ABL38648
ID ABL38648 standard; DNA; 20 BP.
XX AC ABL38648;
XX DT 16-APR-2002 (first entry)
XX DE Immunostimulatory nucleic acid SEQ ID NO: 2.
XX KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KM angio genesis; metastasis; cytostatic; ss.
XX OS Synthetic.
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XX XX WO200197843-A2.
PN 27-DEC-2001.
XX PD 22-JUN-2001; 2001WO-US020154.
XX PF 22-JUN-2000; 2000US-0213346P.
XX PR (IOWA ) UNIV IOWA RES FOUND.
XX PA Weiner G, Hartmann G;
XX PI WI; 2002-154611/20.
XX XX Treating or preventing cancer, such as basal cell carcinoma, comprises
PT administering immunostimulatory nucleic acids that induce expression of
PT cell surface antigens and antibodies to a subject having or at risk of
PT developing cancer.
XX PS Disclosure; Page 95; 312pp; English.
XX CC The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for
CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18
RESULT 653
ABL39403/C
ID ABL39403 standard; DNA; 20 BP.
XX AC ABL39403;
XX DT 16-APR-2002 (first entry)
XX DE Immunostimulatory nucleic acid SEQ ID NO: 839.
XX KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KM angio genesis; metastasis; cytostatic; ss.
XX OS Synthetic.
XX PN WO200197843-A2.
XX PD 27-DEC-2001.
XX PF 22-JUN-2001; 2001WO-US020154.
XX PR 22-JUN-2000; 2000US-0213346P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX XX
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PI Weiner G, Hartmann G;  
XX  
XX WPI: 2002-154611/20.  
XX  
XX Treating or preventing cancer, such as basal cell carcinoma, comprises  
PT administering immunostimulatory nucleic acids that induce expression of  
PT cell surface antigens and antibodies to a subject having or at risk of  
PT developing cancer.  
XX  
XX Disclosure, Page 309; 312pp; English.  
XX  
XX The present invention relates to methods for treating or preventing  
CC cancer, involving administering to a subject having or at risk of  
CC developing cancer immunostimulatory nucleic acids that induce expression  
CC of cell surface antigens and antibodies. The methods are useful for  
CC treating or preventing cancer such as basal cell carcinoma, bladder  
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,  
CC breast cancer, cervical cancer, colon and rectum cancer, connective  
CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx  
CC cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-  
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian  
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin  
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The  
CC present sequence is an immunostimulatory oligonucleotide described in the  
CC exemplification of the invention  
XX  
S0 Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 1520 AAAAAAAAAAGTAAA 1537  
Db ||||| ||||| |||||  
20 AAAAAAAAAAAAAAAAAA 3  
  
RESULT 654  
ABLS4775/C  
ID ABLS4775 standard; DNA; 20 BP.  
XX  
XX ABL54775;  
XX  
XX 10-JUN-2002 (first entry)  
XX  
XX CD14 receptor PCR primer SEQ ID NO 9.  
XX  
XX Angiogenin-1 converting enzyme; ACE; CD14; receptor; SNP;  
KM single-nucleotide polymorphism; PCR; primer; ss.  
XX  
XX Synthetic.  
XX  
XX JP2002034599-A.  
XX  
XX 05-FEB-2002.  
XX  
XX 26-JUL-2000; 2000JP-00225354.  
XX  
XX 26-JUL-2000; 2000JP-00225354.  
XX  
XX 26-JUL-2000; 2000JP-00225354.  
XX  
XX (TOYM ) TOYOH K.  
XX  
XX WPI: 2002-275727/32.  
XX  
XX Detecting 1 base polymorphism on a sequence of a chromosome or its  
PT fragment.  
XX  
XX Example 2; Page 10; 10pp; Japanese.  
XX  
XX The invention relates to a method for detecting 1 base polymorphism on  
CC the sequence of a chromosome or its fragment in which a sample nucleic  
CC acid is reacted with a reaction liquor containing a nucleic acid primer  
CC having a base adjacent to the polymorphic base at its 3'-end, one

CC dideoxynucleotide corresponding to a polymorphic base having a  
CC distinguishable feature or its mixture, DNA polymerase and a composition  
CC required for its activity expression to detect the presence of taking  
CC dideoxynucleotide in the nucleic acid primer and to detect the type of  
CC the base to be specified. The method is used for detecting 1 base  
CC polymorphism on the sequence of a chromosome or its fragment. The present  
CC sequence is that of a PCR primer, useful in examples of the invention  
XX  
S0 Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 1520 AAAAAAAAAAGTAAA 1537  
Db ||||| ||||| |||||  
20 AAAAAAAAAAAAAAAAAA 3  
  
RESULT 655  
ABK65035  
ID ABK65035 standard; DNA; 20 BP.  
XX  
XX ABK65035;  
XX  
XX 02-JUL-2002 (first entry)  
XX  
XX Nanoparticle-oligonucleotide #55.  
XX  
XX Nanoparticle-oligonucleotide; nanofabrication; nucleic acid detection;  
KW ss.  
XX  
XX Synthetic.  
XX  
XX WO200218643-A2.  
XX  
XX 07-MAR-2002.  
XX  
XX 10-AUG-2001; 2001WO-US025237.  
XX  
XX 11-AUG-2000; 2000US-0224631P.  
XX  
XX 08-DEC-2000; 2000US-0254392P.  
XX  
XX 11-DEC-2000; 2000US-025235P.  
XX  
XX 12-JAN-2001; 2001US-00760500.  
XX  
XX 28-MAR-2001; 2001US-00920279.  
XX  
XX (NANO-) NANOSPHERE INC.  
XX  
XX Mitkin CA, Letsinger RL, Mucic RC, Storchhoff JU, Elghamian R;  
PI Taton TA, Garimella V, Li Z, Park S;  
XX  
XX WPI: 2002-258024/30.  
XX  
XX Detecting nucleic acid, useful for diagnosis of genetic, viral or  
PT bacterial disease, comprises hybridizing nanoparticles with attached  
PT oligonucleotides to nucleic acid and detecting change brought about by  
PT hybridization.  
XX  
XX  
XX Example 18; Page 410; 412pp; English.  
XX  
XX The invention relates to a method of detecting a nucleic acid (NA) having  
CC at least 2 portions comprising: (a) providing nanoparticles (NP) with  
CC attached oligonucleotides (OGN), where OGN has a sequence complementary  
CC to the sequence of NA; (b) contacting NA and NP under conditions  
CC effective to allow hybridisation of OGN with NA; and (c) observing a  
CC detectable change brought about by hybridisation of OGN with NA. The  
CC method is useful for detecting a nucleic acid, separating a selected  
CC nucleic acid from others and methods of nanofabrication. Detecting  
CC analyses such as nucleic acids and proteins are useful for the diagnosis  
CC of genetic, bacterial and viral diseases. The OGN-NP conjugates that use  
CC cyclic disulphide linkers improve the sensitivity of diagnostic assays.  
CC In particular assays using OGN-NP conjugates prepared using linkers  
CC comprising a steroid residue attached to a cyclic disulphide have been

CC found to be approximately 10 times more sensitive than assays employing  
 CC conjugates prepared using alkaneethiols or acyclic disulphides as the  
 CC linker. The OGN-NP conjugates are stable allowing them to be used  
 CC directly in PCR solutions. Therefore conjugates added as probes to a DNA  
 CC target to be PCR amplified can be carried through the 30 or 40 heating  
 CC cooling cycles of the PCR and are still able to detect the amplicons  
 CC without opening the tubes and causing contamination. ABK64981-ABK65055  
 CC represent nanoparticle-oligonucleotides of the invention  
 XX

Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAAA 1537  
 Db 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 656

ABK65050  
 ID ABK65050 standard; DNA; 20 BP.

AC ABK65050;

DT 02-JUL-2002 (first entry)

XX Nanoparticle-oligonucleotide #70.

KW Nanoparticle-oligonucleotide; nanofabrication; nucleic acid detection;  
 ss.

XX Synthetic.

PN W0200218643-A2.

PD 07-MAR-2002.

XX 10-AUG-2001; 2001WO-US025237.

PR 11-AUG-2000; 2000US-0224631P.

PR 08-DEC-2000; 2000US-0254392P.

PR 11-DEC-2000; 2000US-0255235P.

PR 12-JAN-2001; 2001US-00760500.

PR 28-MAR-2001; 2001US-00820279.

XX (NANO-) NANOSPHERE INC.

PI Mirkh CA, Letsinger RL, Mucic RC, Storchhoff JJ, Elghanian R;

PI Taton TA, Garimella V, Li Z, Park S;

DR WPI; 2002-258024/30.

XX  
 PT Detecting nucleic acid, useful for diagnosis of genetic, viral or  
 PT bacterial disease, comprises hybridizing nanoparticle with attached  
 PT oligonucleotides to nucleic acid and detecting change brought about by  
 PT hybridization.

XX Example 24; Fig 44; 412bp; English.

XX  
 CC The invention relates to a method of detecting a nucleic acid (NA) having  
 CC at least 2 portions comprising: (a) providing nanoparticles (NP) with  
 CC attached oligonucleotides (OGN), where OGN has a sequence complementary  
 CC to the sequence of NA; (b) contacting NA and NP under conditions  
 CC effective to allow hybridisation of OGN with NA; and (c) observing a  
 CC detectable change brought about by hybridisation of OGN with NA. The  
 CC method is useful for detecting a nucleic acid, separating a selected  
 CC nucleic acid from others and methods of nanofabrication. Detecting  
 CC analyses such as nucleic acids and proteins are useful for the diagnosis  
 CC of genetic, bacterial and viral diseases. The OGN-NP conjugates that use  
 CC cyclic disulphide linkers improve the sensitivity of diagnostic assays.  
 CC In particular assays using OGN-NP conjugates prepared using linkers

CC comprising a steroid residue attached to a cyclic disulphide have been  
 CC found to be approximately 10 times more sensitive than assays employing  
 CC conjugates prepared using alkaneethiols or acyclic disulphides as the  
 CC linker. The OGN-NP conjugates are stable allowing them to be used  
 CC directly in PCR solutions. Therefore conjugates added as probes to a DNA  
 CC target to be PCR amplified can be carried through the 30 or 40 heating  
 CC cooling cycles of the PCR and are still able to detect the amplicons  
 CC without opening the tubes and causing contamination. ABK64981-ABK65055  
 CC represent nanoparticle-oligonucleotides of the invention  
 XX

Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAAA 1537  
 Db 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 657

AAD35464/c  
 ID AAD35464 standard; DNA; 20 BP.

AC AAD35464;

DT 25-JUL-2002 (first entry)

XX Rat SCF 5' CDNA amplifying PCR primer, 220-3.

XX Rat; stem cell factor; SCF protein; leucopenia; thrombocytopenia;  
 KW anaemia; myelosuppression; nerve damage; myeloproliferative disorder;  
 KW infertility; neoplasia; myelofibrosis; osteoporosis;  
 KW metastatic carcinoma; acute leukaemia; multiple myeloma; sarcoidosis;  
 KW Hodgkin's disease; lymphoma; Gaucher's disease; Niemann-Pick disease;  
 KW Letterer-Siwe disease; refractory erythroidleucic anaemia; kala azar;  
 KW Di Guglielmo syndrome; congestive splenomegaly; splenic pancytopenia;  
 KW disseminated fungus disease; fulminating septicemia; plebaldism; AIDS;  
 KW acquired immune deficiency syndrome; malaria; military tuberculosis;  
 KW pyridoxine deficiency; vitamin B12 deficiency; folic acid deficiency;  
 KW Diamond Blackfan anaemia; hypopigmentation disorder; vitiligo; PCR;  
 KW primer; ss.

XX Rattus sp.

OS US2002018763-A1.

PN 14-FEB-2002.

XX 12-JAN-1998; 98US-00005243.

PR 24-MAY-1995; 95US-00449653.

XX (ZSEB/) ZSEBO K M.

PA (BOSS/) BOSSLMAN R A.

PA (SUGG/) SUGGS S V.

PA (MART/) MARTIN F H.

XX Zeebo KM, Bosselman RA, Sugge SV, Martin FH;

DR WPI; 2002-350789/38.

XX  
 PT Novel non-naturally-occurring stem cell factor polypeptide, useful for  
 PT treating leucopenia, thrombocytopenia, anemia and for enhancing  
 PT engraftment of bone marrow during transplantation in a mammal.

XX Example 3; Fig 12C; 217bp; English.

XX The present invention relates to novel non-naturally-occurring stem cell  
 CC factor (SCF) polypeptides having an amino acid sequence sufficiently  
 CC duplicative of that of naturally-occurring SCF to allow possession of  
 CC hematopoietic biological activity of naturally occurring SCF. Sequences

CC of the invention are useful for treating leucopenia, thrombocytopaenia, CC anaemia and for enhancing bone marrow recovery in treatment of radiation, CC engraftment of bone marrow during transplantation in mammals and chemical CC or chemotherapeutic induced bone marrow aplasia or myelosuppression. They CC are also useful for treating acquired immune deficiency in a human, nerve CC damage, neoplasia, infertility, myeloproliferative disorder, intestinal CC damage in a mammal. SCF sequences are useful for preparing biologically CC active polymer polypeptide adduct, for enhancing transfection of early CC haematopoietic progenitor cells with a gene, and transfer of a gene into CC a mammal. They are useful for treating myelofibrosis, myelocytosis, CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma, CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease, CC Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo CC syndrome, congestive splenomegaly, Kala azar, sarcoidosis, primary CC splenic pancytopenia, disseminated fungus disease, malaria, military CC tuberculosis, fulminating septicæmia, pyridoxine deficiency, vitamin B12 CC and folic acid deficiency, Diamond Blackfan anaemia, hypopigmentation CC disorders such as piebaldism, AIDS (acquired immune deficiency syndrome) CC and vitiligo. The present sequence is a PCR primer which is used for CC amplifying the 5' end of rat SCF cDNA. This sequence is used in the CC exemplification of the invention

XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAA 1537

Db 18 AAAAAAAAAAAAAAAAA 1

RESULT 658  
AAD35466/c  
ID AAD35466 standard; DNA; 20 BP.

XX AAD35466;

XX 25-JUL-2002 (first entry)

XX Rat SCF 5' cDNA amplifying PCR primer, 220-11.

XX Rat: stem cell factor; SCF protein; leucopenia; thrombocytopaenia;  
XX anaemia; myelosuppression; nerve damage; myeloproliferative disorder;  
XX infertility; neoplasia; myelofibrosis; myelocytosis; osteopetrosis;  
XX metastatic carcinoma; acute leukaemia; multiple myeloma; sarcoidosis;  
XX Hodgkin's disease; lymphoma; Gaucher's disease; Niemann-Pick disease;  
XX Letterer-Siwe disease; refractory erythroblastic anaemia; Kala azar;  
XX Di Guglielmo syndrome; congestive splenomegaly; splenic pancytopenia;  
XX disseminated fungus disease; fulminating septicæmia; piebaldism; AIDS;  
XX acquired immune deficiency syndrome; malaria; military tuberculosis;  
XX pyridoxine deficiency; vitamin B12 deficiency; folic acid deficiency;  
XX Diamond Blackfan anaemia; hypopigmentation disorder; vitiligo; PCR;  
XX primer; ss.

XX Rattus sp.

XX US2002018763-A1.

XX 14-FEB-2002.

XX 12-JAN-1998; 98US-00005243.

XX 24-MAY-1995; 95US-00449653.

XX (ZSEB/) ZSEBO K M.

XX (BOSS/) BOSSMAN R A.

XX (SUGG/) SUGGS S V.

XX (MART/) MARTIN F H.

XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;

DR WPI; 2002-350789/38.  
XX Novel non-naturally-occurring stem cell factor polypeptide, useful for  
PT treating leucopenia, thrombocytopaenia, anemia and for enhancing  
PT engraftment of bone marrow during transplantation in a mammal.  
XX Example 3; Fig 12C; 217pp; English.

XX The present invention relates to novel non-naturally-occurring stem cell  
CC factor (SCF) polypeptides having an amino acid sequence sufficiently  
CC duplicative of that of naturally-occurring SCF to allow possession of  
CC haematopoietic biological activity of naturally occurring SCF. Sequences  
CC of the invention are useful for treating leucopenia, thrombocytopaenia,  
CC anaemia and for enhancing bone marrow recovery in treatment of radiation,  
CC engraftment of bone marrow during transplantation in mammals and chemical  
CC or chemotherapeutic induced bone marrow aplasia or myelosuppression. They  
CC are also useful for treating acquired immune deficiency in a human, nerve  
CC damage, neoplasia, infertility, myeloproliferative disorder, intestinal  
CC damage in a mammal. SCF sequences are useful for preparing biologically  
CC active polymer polypeptide adduct, for enhancing transfection of early  
CC haematopoietic progenitor cells with a gene, and transfer of a gene into  
CC a mammal. They are useful for treating myelofibrosis, myelocytosis,  
CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,  
CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,  
CC Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo  
CC syndrome, congestive splenomegaly, Kala azar, sarcoidosis, primary  
CC splenic pancytopenia, disseminated fungus disease, malaria, military  
CC tuberculosis, fulminating septicæmia, pyridoxine deficiency, vitamin B12  
CC and folic acid deficiency, Diamond Blackfan anaemia, hypopigmentation  
CC disorders such as piebaldism, AIDS (acquired immune deficiency syndrome)  
CC and vitiligo. The present sequence is a PCR primer which is used for  
CC amplifying the 5' end of rat SCF cDNA. This sequence is used in the  
CC exemplification of the invention

XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAA 1537

Db 18 AAAAAAAAAAAAAAAAA 1

RESULT 659  
ABS73848/c  
ID ABS73848 standard; DNA; 20 BP.

XX ABS73848;

XX 05-DEC-2002 (first entry)

XX SCF universal oligonucleotide 220-3.

XX Stem cell factor; SCF; blood-forming system; blood cell disorder;  
XX haematopoietic system; metastatic carcinoma; acute leukaemia;  
XX multiple myeloma; Hodgkin's disease; lymphoma; malaria; vitiligo;  
XX refractory erythroblastic anaemia; military tuberculosis; cytosstatic;  
XX disseminated fungus disease; haematopoietic; tuberculostatic;  
XX antianaemic; antifungal; antimalarial; dermatological; ss.

XX Synthetic.

XX BP124158-A2.

XX 18-SEP-2002.

XX 04-OCT-1990; 2002EP-00008587.

XX 16-OCT-1989; 89US-00422383.

XX 11-JUN-1990; 90US-00537198.

XX 24-AUG-1990; 90US-00573616.

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PR 28-SEP-1990; 90WO-US005548.
PR 01-OCT-1990; 90US-00589701.
PR 04-OCT-1990; 90EP-00310899.
PR 04-OCT-1990; 95EP-00105391.
XX
PA (AMGE-) AMGEN INC.
PI Zeebo KM, Sugas SV, Bosselman RA, Martin FH;
DR WPI; 2002-684093/74.
XX
XX Production of a human stem cell factor (SCF) polypeptide for treating
PT disorders involving blood cells, such as leukemia, comprises culturing
PT mammalian cells comprising non-human SCF promoter DNA linked to DNA
PT encoding the human SCF.
XX
PS Example 3, Fig 12C, 120pp; English.
XX
CC The present invention relates to novel stem cell factors (SCFs),
CC polynucleotide sequences encoding the SCFs, and methods of producing
CC them. SCFs are involved in the blood-forming (haematopoietic) system in
CC mammals, particularly humans. The method of the invention is useful for
CC the production of human SCF. The stem cell factors are useful to treat
CC disorders involving blood cells e.g. metastatic carcinoma, acute
CC leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, refractory
CC erythroblastic anaemia, miliary tuberculosis, disseminated fungus
CC disease, malaria, and vitiligo. The present sequence representing a
CC universal oligonucleotide for SCF DNA is used in the examples of the
CC present invention
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 660
ABST73850/c
ID ABST73850 standard; DNA; 20 BP.
XX
AC ABST73850;
XX
DT 05-DEC-2002 (first entry)
XX
DE SCF universal oligonucleotide 220-11.
XX
KM Stem cell factor; SCF; blood-forming system; blood cell disorder;
KM haematopoietic system; metastatic carcinoma; acute leukaemia;
KM multiple myeloma; Hodgkin's disease; lymphoma; malaria; vitiligo;
KM refractory erythroblastic anaemia; miliary tuberculosis; cytostatic;
KM disseminated fungus disease; haematopoietic; tuberculosis;
KM antianaemic; antifungal; antimalarial; dermatological; ss.
XX
OS Synthetic.
XX
PN EPI241258-A2.
XX
PD 18-SEP-2002.
XX
PF 04-OCT-1990; 2002EP-00008587.
XX
XX 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 28-SEP-1990; 90WO-US005548.
PR 01-OCT-1990; 90US-00589701.
PR 04-OCT-1990; 90EP-00310899.
PR 04-OCT-1990; 95EP-00105391.
```

```
XX
XX (AMGE-) AMGEN INC.
PA Zeebo KM, Sugas SV, Bosselman RA, Martin FH;
PI Zeebo KM, Sugas SV, Bosselman RA, Martin FH;
PI Zeebo KM, Sugas SV, Bosselman RA, Martin FH;
DR WPI; 2002-684093/74.
XX
XX Production of a human stem cell factor (SCF) polypeptide for treating
PT disorders involving blood cells, such as leukemia, comprises culturing
PT mammalian cells comprising non-human SCF promoter DNA linked to DNA
PT encoding the human SCF.
XX
PS Example 3, Fig 12C, 120pp; English.
XX
CC The present invention relates to novel stem cell factors (SCFs),
CC polynucleotide sequences encoding the SCFs, and methods of producing
CC them. SCFs are involved in the blood-forming (haematopoietic) system in
CC mammals, particularly humans. The method of the invention is useful for
CC the production of human SCF. The stem cell factors are useful to treat
CC disorders involving blood cells e.g. metastatic carcinoma, acute
CC leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, refractory
CC erythroblastic anaemia, miliary tuberculosis, disseminated fungus
CC disease, malaria, and vitiligo. The present sequence representing a
CC universal oligonucleotide for SCF DNA is used in the examples of the
CC present invention
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 18 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 661
AAL45122/c
ID AAL45122 standard; DNA; 20 BP.
XX
AC AAL45122;
XX
DT 24-MAY-2002 (first entry)
XX
DE Oligonucleotide synthesis method related DNA #1.
XX
KM Oligonucleotide synthesis; polynucleotide array; protecting group;
KM oxidation; ss.
XX
OS Synthetic.
XX
PN EPI176151-A1.
XX
PD 30-JAN-2002.
XX
PF 27-JUL-2001; 2001EP-00118360.
XX
PR 28-JUL-2000; 2000US-00627249.
XX
XX (AGIL-) AGILENT TECHNOLOGIES INC.
PA Dellinger DJ, Perpost MCM, Betley JR, Caruthers M;
PI Dellinger DJ, Perpost MCM, Betley JR, Caruthers M;
DR WPI; 2002-156732/21.
XX
XX Synthesis of polynucleotide useful during fabrication of an array
PT involves coupling nucleoside phosphoramidite and a solid-supported
PT nucleoside and treating the product with an oxidation/deprotection
PT composition.
XX
XX Example 1, Page 15; 36pp; English.
XX
```

CC The present invention relates to a method for the synthesis of a  
CC polynucleotide which involves coupling a second nucleoside to a first  
CC nucleoside through a phosphate linkage, where the second nucleoside has a  
CC non-carbonate protecting group protecting a hydroxyl, and exposing the  
CC product to a composition which concurrently oxidizes the phosphate formed  
CC to a phosphate and deprotects the protected hydroxyl of the second  
CC nucleoside. The method is useful for synthesizing the polynucleotides,  
CC for carrying out either 3' to 5' or 5' to 3' synthesis and for  
CC fabricating an addressable array of polynucleotides on a substrate. The  
CC present sequence is an oligonucleotide produced to demonstrate the method  
CC of the invention  
XX  
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 20 AAAAAAAAAAAAAAAAAA 3  
  
RESULT 662  
ABL36232  
ID ABL36232 standard; DNA; 20 BP.  
AC ABL36232;  
XX  
DT 08-APR-2002 (first entry)  
XX  
M tuberculosis rRNA probe SEQ ID NO: 83.  
DE  
XX  
KM Skin disorder; psoriasis; atopic dermatitis; allergic contact dermatitis;  
KM alopecia areata; skin cancer; Mycobacterium vaccae; melanoma; cytostatic;  
KM antipsoriatic; dermatological; antiinflammatory; antiallergic;  
KM Th2 immune response; immunomodulatory; probe; ss.  
XX  
OS Mycobacterium tuberculosis.  
XX  
PN US6328978-B1.  
PD 11-DEC-2001.  
XX  
PF 02-JUN-1999; 99US-00324542.  
XX  
PR 23-DEC-1997; 97US-00997080.  
XX  
PA (GENE-) GENESIS RES & DEV CORP LTD.  
XX  
PI Watson JD, Tan PLJ, Preestidge R;  
XX  
DR WPI; 2002-138361/18.  
XX  
PT Inhibiting skin inflammation associated with skin disorder e.g.  
PT psoriasis, by administering composition comprising delipidated and  
PT delipoylipidated Mycobacterium vaccae cells or Mycobacterium vaccae  
PT culture filtrate.  
XX  
XX  
XX Example 5; Col 99-100; 116pp; English.  
XX  
CC The present invention relates to a method of inhibiting skin inflammation  
CC associated with a skin disorder selected from psoriasis, atopic  
CC dermatitis and allergic contact dermatitis, which involves administering  
CC a composition containing delipidated and delipoylipidated Mycobacterium  
CC vaccae cells or M. vaccae culture filtrate. The skin disorder to be  
CC treated may also include alopecia areata, and skin cancers such as basal  
CC cell carcinoma, squamous cell carcinoma, and melanoma. The composition  
CC acts by inhibiting the Th2 immune response. The present sequence is a  
CC probe described in the exemplification of the invention  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAA 18  
  
RESULT 663  
ABS64673  
ID ABS64673 standard; DNA; 20 BP.  
AC ABS64673;  
XX  
DT 15-NOV-2002 (first entry)  
XX  
DE Nucleic acid detection method associated polynucleotide #55.  
XX  
KM Nucleic acid detection method; nanoparticle-oligonucleotide conjugate;  
KM nanoparticle; viral RNA detection; bacterial DNA detection;  
KM fungal DNA detection; nanoprobe conjugate; ss.  
XX  
OS Synthetic.  
XX  
PN WO200246472-A2.  
XX  
PD 13-JUN-2002.  
XX  
PF 07-DEC-2001; 2001WO-US046418.  
XX  
PR 08-DEC-2000; 2000US-0254392P.  
PR 08-DEC-2000; 2000US-0254418P.  
PR 11-DEC-2000; 2000US-0255235P.  
PR 11-DEC-2000; 2000US-0255236P.  
PR 12-JAN-2001; 2001US-00760500.  
PR 28-MAR-2001; 2001US-00820279.  
PR 09-APR-2001; 2001US-0282640P.  
PR 10-AUG-2001; 2001US-00927777.  
XX  
XX (NANO-) NANOSPHERE INC.  
XX  
PI Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JD, Elghanian R;  
PI Taton TA, Garimella V, Li Z, Park S;  
XX  
DR WPI; 2002-608256/65.  
XX  
PT Detecting nucleic acid having two portions, by providing nanoparticles  
PT having oligonucleotides attached to it, contacting nucleic acid and  
PT nanoparticles to allow hybridization, and observing detectable change.  
XX  
XX  
XX Example 18; Page 437; 442pp; English.  
XX  
CC The invention describes a method of detecting (M1) a nucleic acid having  
CC two portions, involving providing nanoparticles having oligonucleotides  
CC attached to it, which has a sequence complementary to sequence of two  
CC portions of nucleic acid, contacting nucleic acid and nanoparticles, to  
CC allow hybridisation of oligonucleotides with two or more portions of  
CC nucleic acid, and observing a detectable change brought about by  
CC hybridisation. (M1), nanoparticles (I), nanoparticle-oligonucleotide  
CC conjugates (II) and the aggregate probe are useful for detecting two or  
CC more nucleic acids (from a biological source) having at least two  
CC portions, such as viral RNA, bacterial or fungal DNA, a gene associated  
CC with a disease, synthetic, or structurally-modified natural or synthetic  
CC RNA or DNA, or a product of a polymerase chain reaction amplification.  
CC (II) is useful for preparing a nanoprobe conjugate for detecting an  
CC analyte, and for detecting a nucleic acid bound to an electrode surface.  
CC (I) and (II) are useful for fabrication, and for separating a selected  
CC nucleic acid having two portions from other nucleic acids. (I), (II) and  
CC the aggregate probe are useful for detecting an analyte (especially  
CC polyvalent analyte) in a sample. This sequence represents a  
CC polynucleotide used to demonstrate the method of the invention  
XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1520 AAAAAAAAAAGTAAAA 1537  
 Db 1 AAAAAAAAAAAAAAAAAA 18  
 RESULT 664  
 ABS64688 standard; DNA; 20 BP.  
 ID ABS64688;  
 AC ABS64688;  
 XX  
 DT 15-NOV-2002 (first entry)  
 DE Nucleic acid detection method associated polynucleotide #70.  
 XX  
 KM Nucleic acid detection method; nanoparticle-oligonucleotide conjugate;  
 KM nanoparticle; viral RNA detection; bacterial DNA detection;  
 KM fungal DNA detection; nanoprobe conjugate; ss.  
 XX  
 OS Synthetic.  
 XX  
 WO200246472-A2.  
 PD 13-JUN-2002.  
 PF 07-DEC-2001; 2001WO-US046418.  
 XX  
 PR 08-DEC-2000; 2000US-0254392P.  
 PR 08-DEC-2000; 2000US-0254418P.  
 PR 11-DEC-2000; 2000US-0255235P.  
 PR 11-DEC-2000; 2000US-0255236P.  
 PR 12-JAN-2001; 2001US-00760500.  
 PR 28-MAR-2001; 2001US-00820279.  
 PR 09-APR-2001; 2001US-0282640P.  
 PR 10-AUG-2001; 2001US-00927777.  
 XX  
 PA (NANO-) NANOSPHERE INC.  
 XX  
 PI Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JT, Elghanian R;  
 PI Taton TA, Garimella V, Li Z, Park S;  
 XX  
 DR WPI; 2002-608256/65.  
 XX  
 PT Detecting nucleic acid having two portions, by providing nanoparticles  
 PT having oligonucleotides attached to it, contacting nucleic acid and  
 PT nanoparticles to allow hybridization, and observing detectable change.  
 XX  
 PS Example 24; Fig 44; 442pp; English.  
 XX  
 CC The invention describes a method of detecting (M1) a nucleic acid having  
 CC two portions, involving providing nanoparticles having oligonucleotides  
 CC attached to it, which has a sequence complementary to sequence of two  
 CC portions of nucleic acid, contacting nucleic acid and nanoparticles, to  
 CC allow hybridisation of oligonucleotides with two or more portions of  
 CC nucleic acid, and observing a detectable change brought about by  
 CC hybridisation. (M1), nanoparticles (I), nanoparticle-oligonucleotide  
 CC conjugates (II) and the aggregate probe are useful for detecting two or  
 CC more nucleic acids (from a biological source) having at least two  
 CC portions, such as viral RNA, bacterial or fungal DNA, a gene associated  
 CC with a disease, synthetic, or structurally-modified natural or synthetic  
 CC RNA or DNA, or a product of a polymerase chain reaction amplification.  
 CC (II) is useful for preparing a nanoprobe conjugate for detecting an  
 CC analyte, and for detecting a nucleic acid bound to an electrode surface.  
 CC (I) and (II) are useful for fabrication, and for separating a selected  
 CC nucleic acid having two portions from other nucleic acids. (I), (II) and  
 CC the aggregate probe are useful for detecting an analyte (especially  
 CC polyvalent analyte) in a sample. This sequence represents a

CC polynucleotide used to demonstrate the method of the invention  
 XX  
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
 XX  
 Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1520 AAAAAAAAAAGTAAAA 1537  
 Db 1 AAAAAAAAAAAAAAAAAA 18  
 RESULT 665  
 AEN87103/c  
 ID AEN87103 standard; DNA; 20 BP.  
 XX  
 AC AEN87103;  
 XX  
 DT 30-JUL-2002 (first entry)  
 DE Capture probe CP5' SEQ ID NO:23.  
 XX  
 KM Protein scaffold; antibody; binding protein; immunoglobulin;  
 KM tumour necrosis factor alpha; TNF-alpha; protein framework; probe; ss.  
 XX  
 OS Synthetic.  
 XX  
 WO200232925-A2.  
 PD 25-APR-2002.  
 PF 16-OCT-2001; 2001WO-US032233.  
 PR 16-OCT-2000; 2000US-00688566.  
 XX  
 PA (PHYL-) PHYLLOS INC.  
 XX  
 PI Lipovsek D, Wagner RW, Kuimelis RG;  
 XX  
 DR WPI; 2002-444238/47.  
 XX  
 PT New non-antibody proteins having an immunoglobulin fold, useful in  
 PT research, therapeutic or diagnostic fields, particularly as scaffolds for  
 PT designing proteins with specific properties, e.g. for binding any antigen  
 PT of interest.  
 XX  
 PS Disclosure; Page 58; 94pp; English.  
 XX  
 CC The present invention describes a non-antibody protein, comprising a  
 CC domain having an immunoglobulin-like fold, derived from a reference  
 CC protein having a mutated amino acid sequence, where the non-antibody  
 CC protein binds with a Kd at least as tight as 10 nM to a compound that is  
 CC not bound as tightly by the reference protein. The non-antibody protein  
 CC is useful as scaffold for selecting or designing a protein framework  
 CC with specific and favourable properties, e.g. for binding any antigen of  
 CC interest, or for destroying or inactivating antibody molecules. The non-  
 CC antibody protein is also useful in all areas where antibodies are used,  
 CC e.g. research, therapeutic or diagnostic fields, and for screening novel  
 CC binding proteins useful in the above-mentioned fields. The present  
 CC proteins have thermodynamic properties superior to those of natural  
 CC antibodies, and can be evolved rapidly in vitro. The present proteins or  
 CC antibody mimics exhibit improved biophysical properties, such as  
 CC stability under reducing conditions and solubility at high  
 CC concentrations. In addition, these molecules are readily expressed and  
 CC folded in prokaryotic systems (e.g. Escherichia coli), in eukaryotic  
 CC systems (e.g. yeast), or in in vitro translation systems (e.g. rabbit  
 CC reticulocyte lysate system). Furthermore, these proteins are extremely  
 CC amenable to affinity maturation techniques involving multiple cycles of  
 CC selection, e.g. in vitro selection using RNA-protein fusion technology,  
 CC phage display or yeast display systems. The present sequence is used in  
 CC the exemplification of the present invention



SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537  
 |||||  
 DB 20 AAAAAAAAAAAAAAAAAA 3

RESULT 666

AA161645  
 ID AA161645 standard; DNA; 20 BP.

XX  
 AC AA161645;

XX 22-SEP-2003 (first entry)

DE Thiol-modified oligo #4 used in the nucleic acid detection method.

XX Nucleic acid detection; fabrication; ss.

XX Unidentified.

XX WO200305829-A2.

XX 01-MAY-2003.

XX 08-OCT-2002; 2002WO-US032088.

XX 09-OCT-2001; 2001US-0327864P.

XX 07-DEC-2001; 2001US-00008978.

XX (NANO-) NANOSPHERE INC.

XX Park S, Taton TA, Mirkin CA;

XX WPI; 2003-430409/40.

PT Detecting nucleic acid having two portions, by providing nanoparticles having oligonucleotides attached to it, contacting nucleic acid and PT nanoparticles to allow hybridization, and observing detectable change.

XX Example 18; Page 179; 467pp; English.

XX The invention relates to a method of detecting a nucleic acid having two portions. The method involves providing nanoparticles having

CC oligonucleotides attached to it which has a sequence complementary to

CC sequence of two portions of nucleic acid, contacting nucleic acid and

CC nanoparticles to allow hybridization of oligonucleotides with two or more

CC portions of nucleic acid and observing a detectable change brought about

CC by hybridization. The method and aggregate probes are useful for

CC detecting two or more nucleic acids (from a biological source) having at

CC least two portions such as viral RNA, bacterial or fungal DNA, a gene

CC associated with a disease, synthetic or structurally modified natural or

CC synthetic RNA or DNA, or a product of a polymerase chain reaction

CC amplification. The invention is useful for preparing a nanoprobe

CC conjugate for detecting an analyte and for detecting a nucleic acid bound

CC to an electrode surface. It is also useful for fabrication and for

CC separating a selected nucleic acid having two portions from other nucleic

CC acids. The present sequence is an oligo used to illustrate the method of

XX the invention

Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537  
 |||||  
 DB 1 AAAAAAAAAAAAAAAAAA 18

RESULT 667

AB259815/C  
 ID AB259815 standard; RNA; 20 BP.

XX  
 AC AB259815;

XX 01-APR-2003 (first entry)

DE Potato gene PCR primer dT20.

XX Potato: plant; mitochondrial carrier protein; elongation factor EF-2;

XX transferin binding protein; receptor-like protein kinase; helicase;

XX non-long terminal repeat retroelement reverse transcriptase;

XX overwatering; transgenic; reverse transcriptase; PCR; primer; ss.

XX Synthetic.

XX DE10114063-A1.

XX 10-OCT-2002.

XX 22-MAR-2001; 2001DE-01014063.

XX 22-MAR-2001; 2001DE-01014063.

XX (MPBC-) MPB COLOGNE GMBH MOLECULAR PLANT & PROTE.

XX Buelow L, Tscharncke M, Haussehl K;

XX WPI; 2003-041808/04.

XX New DNA sequences from potato, useful for producing plants with altered

XX properties, e.g. tolerance of flooding, also related proteins, antibodies

XX and inhibitory sequences.

XX Example 1; Page 8; 26pp; German.

XX The invention relates to DNA sequences (I) that encode six specific plant

CC proteins: (i) a protein (ABP60425) with mitochondrial carrier protein

CC activity (Iia); (ii) a protein (ABP60426) with transferin binding

CC protein activity (Iib); (iii) a protein (ABP60427) with receptor-like

CC protein kinase activity (Iic); (iv) a protein (ABP60428) with elongation

CC factor EF-2 activity (Iid); (v) a protein (ABP60429) with non-long

CC terminal repeat retroelement reverse transcriptase activity (Iie); or

CC sequences, derived ribozymes and antisense sequences, expression vectors,

CC encoded proteins and antibodies against the proteins, are used to produce

CC plants with altered properties, including tolerance of overwatering. The

CC antibodies are also used for isolation of the proteins and in

CC immunassays. Also (I) or their primer or probe fragments are used to

CC screen for transmitters and constitutively, aerobically or anaerobically

CC inducible plant promoters, specifically for use in potatoes and the

CC sequence that encodes (Iid) is used to alter the translation profile in

CC plants. Since (i) are derived from potato, their promoters and

CC terminators provide high level transgene expression in potato, with

CC improved tissue specificity and inducibility, and can also be used to

CC control endogenous genes. The present sequence is that of a PCR primer

XX used in the first strand synthesis of cDNAs derived from potato

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537  
 |||||  
 DB 20 AAAAAAAAAAAAAAAAAA 3

RESULT 668

```

ABX79181
ID  ABX79181 standard; DNA; 20 BP.
XX
XX  AC  ABX79181;
XX
XX  DT  15-APR-2003 (first entry)
XX
XX  DE  Thio-modified 20da oligonucleotide.
XX
XX  NM  Nanoparticle; ss; nucleic acid detection; viral disease; probe;
KM  human immunodeficiency virus infection; hepatitis virus infection;
KM  herpes virus infection; cytomegalovirus infection; forensic science;
KM  Epstein-Barr virus infection; bacterial disease; gene therapy;
KM  sexually transmitted disease; inherited disorder; DNA sequencing;
KM  paternity testing; cell line authentication.
XX
XX  OS  Synthetic.
XX
XX  PN  US2002155462-A1.
XX
XX  PD  24-OCT-2002.
XX
XX  PF  12-OCT-2001; 2001US-00976577.
XX
XX  PR  29-JUL-1996; 96US-0031809P.
XX  PR  21-JUL-1997; 97WO-US012783.
XX  PR  29-JAN-1999; 99US-00240755.
XX  PR  25-JUN-1999; 99US-00344667.
XX  PR  26-APR-2000; 2000US-0200161P.
XX  PR  26-JUN-2000; 2000US-00603830.
XX
XX  PA  (NANO-) NANOSPHERE INC.
XX
XX  PI  Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JJ, Elghanian R;
XX  Taton TA;
XX  WP1: 2003-198491/19.
XX
XX  PT  Detecting nucleic acids having at least 2 portions comprises use of
XX  nanoparticles which have oligonucleotides attached to them that are
XX  complementary to portions of the nucleic acid sequence.
XX
XX  PS  Example 18; Page 44; 130pp; English.
XX
XX  CC  The invention relates to detecting a nucleic acid (NA) having at least 2
XX  portions, comprises providing a type of nanoparticles (NP) having
XX  attached to oligonucleotides (O) ((O) on each NP has a sequence
XX  complementary to sequence of at least 2 portions of NA), contacting NA
XX  and NP to allow hybridisation of (O) on NP with 2 or more portions of NA,
XX  and observing a detectable change brought about by hybridisation of (O)
XX  on NP with NA. The nanoparticle is useful for separating a selected
XX  nucleic acid having at least 2 portions, from other nucleic acids, and
XX  for detecting nucleic acids having at least 2 portions. The method of
XX  using NP is useful for detecting any type of nucleic acids which may be
XX  used for diagnosis of disease and in sequencing of nucleic acids.
XX  CC  Preferably, the method is useful for detecting nucleic acids for
XX  diagnosis and/or monitoring of viral diseases (human immunodeficiency
XX  virus), hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr
XX  virus), bacterial diseases, sexually transmitted diseases, inherited
XX  disorders, in forensics, in DNA sequencing, for paternity testing, for
XX  cell line authentication and for monitoring gene therapy. The method is
XX  useful in research and analytical laboratories in DNA sequencing and in
XX  the field to detect the presence of specific pathogens. Detecting nucleic
XX  acids based on observing a colour change with the naked eye is cheap,
XX  fast, simple and robust, and do not require specialised expensive
XX  equipment. The present sequence is a nanoparticle (e.g. gold particles)
XX  labelled probe used to demonstrate the method of the invention
XX
XX  SQ  Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX  Query March 1.1%; Score 14.8; DB 1; Length 20;
XX  Best Local Similarity 88.9%; Pred.No.4.4e+02;
XX  Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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OY  1520 AAAAAAAAAAAGTAAA 1537
XX  |||||
XX  DB  1 AAAAAAAAAAAAAAAAAA 18
XX
XX  RESULT 669
XX  ABX92177
XX  ID  ABX92177 standard; DNA; 20 BP.
XX
XX  AC  ABX92177;
XX
XX  DT  12-MAY-2003 (first entry)
XX
XX  DE  Nanoparticle-associated oligonucleotide SEQ ID 55.
XX
XX  NM  Nanoparticle; nucleic acid detection; hybridisation; diagnosis;
KM  sequencing; viral infection; human immunodeficiency virus; HIV;
KM  hepatitis virus; herpes virus; cytomegalovirus; Epstein-Barr virus;
KM  bacterial infection; sexually transmitted disease; inherited disorder;
KM  forensic; paternity testing; cell line authentication; gene therapy; ss.
XX
XX  OS  Synthetic.
XX
XX  PN  US2002155458-A1.
XX
XX  PD  24-OCT-2002.
XX
XX  PF  28-SEP-2001; 2001US-00967409.
XX
XX  PR  29-JUL-1996; 96US-0031809P.
XX  PR  21-JUL-1997; 97WO-US012783.
XX  PR  29-JAN-1999; 99US-00240755.
XX  PR  25-JUN-1999; 99US-00344667.
XX  PR  26-APR-2000; 2000US-0200161P.
XX  PR  26-JUN-2000; 2000US-00603830.
XX
XX  PA  (NANO-) NANOSPHERE INC.
XX
XX  PI  Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JJ, Elghanian R;
XX  Taton TA;
XX  WP1: 2003-182627/18.
XX
XX  PT  Detecting nucleic acids having at least two portions involves use of
XX  nanoparticles which have oligonucleotides attached to them that are
XX  complementary to portions of the nucleic acid sequence.
XX
XX  PS  Disclosure; Page 59; 130pp; English.
XX
XX  CC  This invention describes a novel method of detecting nucleic acid having
XX  at least two portions. The method involves providing nanoparticles
XX  attached to oligonucleotides, where the oligonucleotide on each
XX  nanoparticle have a sequence complementary to a sequence of at least two
XX  portions of nucleic acid, contacting nucleic acid and nanoparticle to
XX  allow hybridisation of the oligonucleotide on the nanoparticle with two
XX  or more portions of nucleic acid and observing a detectable change
XX  brought about by hybridisation of the oligonucleotide nanoparticle with
XX  nucleic acid. The method is useful for separating a selected nucleic acid
XX  having at least two portions, from other nucleic acids and for detecting
XX  nucleic acids having at least two portions. The method is useful for
XX  detecting any type of nucleic acids which may be used for diagnosis of
XX  disease and in sequencing of nucleic acids. Preferably, the method is
XX  useful for detecting nucleic acids for diagnosis and/or monitoring of
XX  viral infections (human immunodeficiency virus (HIV), hepatitis virus,
XX  herpes virus, cytomegalovirus and Epstein-Barr virus), bacterial
XX  diseases, sexually transmitted diseases, inherited disorders, in
XX  forensics, in DNA sequencing, for paternity testing, for cell line
XX  authentication, and for monitoring gene therapy. The method is useful in
XX  research and analytical laboratories in DNA sequencing, in the field to
XX  detect the presence of specific pathogens. Detecting nucleic acids based
XX  on observing a colour change with the naked eye is cheap, fast, simple
XX  and robust and does not require specialised expensive equipment. ABX92123

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```
CC -ABX92186 and ABQ77356 represent oligonucleotides used to illustrate the
CC method of the invention
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred.No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18
RESULT 670
ACD27255
ID ACD27255 standard; DNA; 20 BP.
AC ACD27255;
XX
DT 15-OCT-2003 (first entry)
DE Nanotechnology nucleic acid detection method associated #54.
XX
KW Nanotechnology; ss; nucleic acid detection; nanoparticle;
KW virus detection; human immunodeficiency virus; HIV; hepatitis; herpes;
KW cytomegalovirus; Epstein-Barr virus; bacterial disease; DNA sequencing;
KW sexually transmitted disease; inherited disorder; forensic;
KW paternity testing; cell line authentication.
XX
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Thiol modified" "
XX
XX US2002155459-A1.
XX
XX 24-OCT-2002.
XX
XX 11-OCT-2001; 2001US-00975062.
XX
XX 29-JUL-1996; 96US-0031809P.
XX 21-JUL-1997; 97WO-US012783.
XX 29-JAN-1999; 99US-00240755.
XX 25-JUN-1999; 99US-00344667.
XX 26-APR-2000; 2000US-0200161P.
XX 26-JUN-2000; 2000US-00603830.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mickin CA, Letsinger RL, Mucic RC, Stornhoff JJ, Elghanian R;
XX Taton TA;
XX
XX WPI; 2003-228114/22.
XX
XX Detecting nucleic acids having 2 portions e.g. for detecting disease,
XX comprises use of nanoparticles which have oligonucleotides attached to
XX them that are complementary to portions of the nucleic acid sequence.
XX
XX Example 18; Page 43; 129pp; English.
XX
XX This invention relates to a novel method for detecting a nucleic acid
XX having 2 portions. The method comprises providing nanoparticles having
XX oligonucleotides attached, where the oligonucleotide on each nanoparticle
XX has a sequence complementary to a sequence of 2 portions of nucleic acid;
XX The nucleic acid and nanoparticle are contacted to allow hybridisation of
XX the oligonucleotide on the nanoparticle with two or more portions of
XX nucleic acid and observing a detectable change brought about by the
XX hybridisation. The method of the invention is useful for separating a
XX selected nucleic acid having 2 portions, from other nucleic acids, and
```

```
CC for detecting nucleic acids having 2 portions. The method of the
CC invention is useful for detecting any type of nucleic acids which may be
CC used for diagnosis of disease and in sequencing of nucleic acids.
CC Preferably, the method is useful for detecting nucleic acids for
CC diagnosis and/or monitoring of viral diseases (human immunodeficiency
CC virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr
CC virus), bacterial diseases, sexually transmitted diseases, inherited
CC disorders, in forensics, in DNA sequencing, for paternity testing, for
CC cell line authentication, for monitoring gene therapy, etc. This method
CC involves detecting nucleic acids based on observing a colour change with
CC the naked eye so is cheap, fast, simple and robust, and does not require
CC specialised expensive equipment. The present sequence represents a thiol
CC modified oligonucleotide sequence used to demonstrate the method of the
CC invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred.No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18
RESULT 671
ACD27125
ID ACD27125 standard; DNA; 20 BP.
AC ACD27125;
XX
DT 15-OCT-2003 (first entry)
DE Nanotechnology nucleic acid detection method oligonucleotide #54.
XX
KW Nanotechnology; nucleic acid detection; nanoparticle; ss; forensic;
KW DNA sequencing; paternity testing; cell line authentication.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= Thiol modified" "
XX
XX US2002164605-A1.
XX
XX 07-NOV-2002.
XX
XX 28-SEP-2001; 2001US-00966312.
XX
XX 29-JUL-1996; 96US-0031809P.
XX 21-JUL-1997; 97WO-US012783.
XX 29-JAN-1999; 99US-00240755.
XX 25-JUN-1999; 99US-00344667.
XX 26-APR-2000; 2000US-0200161P.
XX 26-JUN-2000; 2000US-00603830.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mickin CA, Letsinger RL, Mucic RC, Stornhoff JJ, Elghanian R;
XX Taton TA;
XX
XX WPI; 2003-247253/24.
XX
XX Detecting nucleic acid having two portions, by providing nanoparticles
XX having oligonucleotides attached to it, contacting nucleic acid and
XX nanoparticles to allow hybridization, and observing detectable change,
XX useful in forensics.
XX
XX Example 18; Page 44; 130pp; English.
XX
```

XX This invention relates to a novel method for detecting nucleic acid  
CC sequences having two portions. The method involves providing  
CC nanoparticles having oligonucleotides attached to them, which has a  
CC sequence complementary to sequence of two portions of nucleic acid,  
CC contacting nucleic acid and nanoparticles, to allow hybridisation of  
CC oligonucleotides with two or more portions of nucleic acid, and observing  
CC a detectable change brought about by hybridisation. The method of the  
CC invention and the aggregate probes are useful for detecting two or more  
CC nucleic acids (from a biological source) having at least two portions,  
CC such as viral RNA or DNA, bacterial or fungal DNA, a gene associated with  
CC a disease, synthetic, or a structurally-modified natural or synthetic RNA  
CC or DNA, or a product of a polymerase chain reaction amplification.  
CC Nanoparticles and nanoparticle-oligonucleotide conjugates of the  
CC invention are useful for nanofabrication, and for separating a selected  
CC nucleic acid having two portions from other nucleic acids. The method of  
CC the invention is useful in forensics, DNA sequencing, for paternity  
CC testing, cell line authentication, and monitoring gene therapy.  
CC Diagnostic assays employing the nanoparticle-oligonucleotide conjugates  
CC of the invention improve the sensitivity of the nucleic acid detection  
CC assay. The present sequence represents a thiol modified oligonucleotide  
CC sequence used to demonstrate the method of the invention

XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 672

ACD27385 standard; DNA; 20 BP.

AC ACD27385;

DT 15-OCT-2003 (first entry)

DE Nanotechnology nucleic acid detection method associated #54.

XX Nanoparticle; ss; nucleic acid detection; DNA sequencing;

KM pathogen detection.

XX Synthetic.

OS Location/Qualifiers

Key 1  
FH modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= Thiol modified" "

FT US2002182611-A1.

XX 05-DEC-2002.

PD 28-SEP-2001; 2001US-00966491.

PF 29-JUL-1996; 96US-0031809P.

PR 21-JUL-1997; 97WO-US012783.

PR 29-JAN-1999; 99US-00240755.

PR 25-JUN-1999; 99US-00344667.

PR 26-APR-2000; 2000US-0200161P.

PR 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

PA Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JU, Elghanian R;

PI Taton TA;

DR WPI; 2003-596264/56.

XX Detection of nucleic acid for, e.g. research and analytical laboratories

PT in deoxyribonucleic acid sequencing, involves contacting nucleic acid

PT with nanoparticles having oligonucleotides.

XX Example 18; Page 43; 109pp; English.

XX This invention relates to a novel method for detecting a nucleic acid by

CC contacting a nucleic acid with at least two types of nanoparticles having

CC oligonucleotides attached, allowing hybridisation of the oligonucleotides

CC on the nanoparticles, and observing a detectable change. The

CC oligonucleotides on each nanoparticle have a sequence complementary to

CC its respective portion of the sequence of the nucleic acid to be

CC detected. The method of the invention may be used for the detection of a

CC nucleic acid used in, e.g. research and analytical laboratories in DNA

CC sequencing, in the field to detect the presence of specific pathogens, in

CC the doctor's office for quick identification of an infection to assist in

CC prescribing a drug for treatment, and in homes and health centres for

CC inexpensive first-line screening. The method of the invention detects

CC nucleic acids based on observing a colour change with the naked eye. This

CC method is cheap, fast, simple, robust and does not require specialised or

CC expensive equipment. The present sequence represents a thiol modified

CC oligonucleotide sequence used to demonstrate the method of the invention

XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 673

ACD27190 standard; DNA; 20 BP.

AC ACD27190;

DT 15-OCT-2003 (first entry)

DE Nanotechnology nucleic acid detection method associated #54.

XX Nanoparticle; ss; nucleic acid detection; DNA sequencing.

XX Synthetic.

OS Location/Qualifiers

Key 1  
FH modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= Thiol modified" "

FT US2002182613-A1.

XX 05-DEC-2002.

PD 12-OCT-2001; 2001US-00976971.

PF 29-JUL-1996; 96US-0031809P.

PR 21-JUL-1997; 97WO-US012783.

PR 29-JAN-1999; 99US-00240755.

PR 25-JUN-1999; 99US-00344667.

PR 26-APR-2000; 2000US-0200161P.

PR 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

PA Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JU, Elghanian R;

PI Taton TA;

XX WP1; 2003-596265/56.  
XX  
XX Detection of nucleic acid for, e.g. research and analytical laboratories  
PT in deoxyribonucleic acid sequencing, involves contacting nucleic acid  
PT with nanoparticles having oligonucleotides.  
XX  
XX Example 18; Page 43; 107pp; English.  
XX  
CC This invention relates to a novel method for detecting a nucleic acid by  
CC contacting nucleic acid with at least two types of nanoparticles having  
CC oligonucleotides, allowing hybridisation of the oligonucleotides on the  
CC nanoparticles, and observing a detectable change. The oligonucleotides on  
CC each nanoparticle have a sequence complementary to its respective portion  
CC of the sequence of the nucleic acid. The method of the invention may be  
CC used for the detection of a nucleic acid used in, e.g. research and  
CC analytical laboratories in DNA sequencing, in the field to detect the  
CC presence of specific pathogens, in the doctor's office for quick  
CC identification of an infection to assist in prescribing a drug for  
CC treatment, and in homes and health centres for inexpensive first-line  
CC screening. The inventive method of detecting nucleic acids based on  
CC observing a colour change with the naked eye are cheap, fast, simple,  
CC robust (the reagents are stable), do not require specialised or expensive  
CC equipment, and little or no instrumentation is required. The present  
CC sequence represents a thiol modified oligonucleotide sequence used to  
CC demonstrate the method of the invention  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
1 AAAAAAAAAAAAAAAAAA 18  
RESULT 674  
ACD27060  
ID ACD27060 standard; DNA; 20 BP.  
XX  
AC ACD27060;  
XX  
DT 15-OCT-2003 (first entry)  
XX  
DE Nanotechnology nucleic acid detection method oligonucleotide #54.  
XX  
KM Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= Thiol modified" "  
XX  
XX US2003044805-A1.  
XX  
XX  
XX 06-MAR-2003.  
XX  
XX  
XX 15-OCT-2001; 2001US-00981344.  
XX  
XX 29-JUL-1996; 96US-0031809P.  
XX 21-JUL-1997; 97WO-US012783.  
XX 29-JAN-1999; 99US-00240755.  
XX 25-JUN-1999; 99US-00344667.  
XX 26-APR-2000; 2000US-0200161P.  
XX 26-JUN-2000; 2000US-00603850.  
XX  
XX (NANO-) NANOSPHERE INC.  
XX  
XX

PI Mirkin CA, Letsinger RL, Mucic RC, Storchhoff UT, Elghanian R;  
PI Taton TA;  
XX  
XX WP1; 2003-521746/49.  
XX  
XX  
XX Detection of nucleic acid having -2 portions used to prepare biomaterials  
PT and in nanofabrication methods, comprises providing nanoparticles,  
PT contacting nucleic acid and nanoparticles, and observing change.  
XX  
XX Example 18; Page 44; 130pp; English.  
XX  
CC This invention relates to a novel method for detecting nucleic acids. The  
CC method comprises providing nanoparticles with oligonucleotides attached  
CC to them, which have a sequence complementary to a sequence of two  
CC portions of nucleic acid, contacting the nucleic acid and nanoparticles  
CC to allow hybridisation of the oligonucleotides with two or more portions  
CC of the nucleic acid, and observing a detectable change brought about by  
CC the hybridisation. The nucleic acid to be detected must have at least two  
CC portions and the distances between these are chosen so that when the  
CC nanoparticle-oligonucleotide conjugate binds the target sequence a  
CC detectable change occurs. The method of the invention is useful for  
CC detecting two or more nucleic acids (from a biological source) having at  
CC least two portions, such as viral RNA, bacterial or fungal DNA, a gene  
CC associated with a disease, synthetic, or structurally-modified natural  
CC or synthetic RNA or DNA, or a product of a polymerase chain reaction  
CC amplification. Nanoparticle-oligonucleotide conjugates of the invention  
CC are useful for preparing a nanoprobe conjugate for detecting an analyte,  
CC and for detecting a nucleic acid bound to an electrode surface.  
CC Nanoparticles and nanoparticle conjugates of the invention are useful for  
CC nanofabrication and for separating a selected nucleic acid having two  
CC portions from other nucleic acids. Diagnostic assays employing  
CC nanoparticle-oligonucleotide conjugates improve the sensitivity of  
CC nucleic acid detection methods and can be used to detect nucleic acids  
CC that are present in only small amounts in a sample. The invention also  
CC provides highly desirable nanoparticle-oligonucleotide conjugates. These  
CC conjugates are stable with tailored hybridisation abilities. The present  
CC sequence represents a thiol modified oligonucleotide sequence used to  
CC demonstrate the method of the invention  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
1 AAAAAAAAAAAAAAAAAA 18  
RESULT 675  
ACH00064  
ID ACH00064 standard; DNA; 20 BP.  
XX  
AC ACH00064;  
XX  
DT 15-OCT-2003 (first entry)  
XX  
DE Nanotechnology nucleic acid detection method oligonucleotide #54.  
XX  
KM Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= Thiol modified" "  
XX  
XX US2003049631-A1.  
XX  
XX  
XX 13-MAR-2003.  
XX

XX 10-OCT-2001; 2001US-00974500.  
PF 29-JUL-1996; 96US-0031809P.  
PR 21-JUL-1997; 97WO-US012783.  
PR 29-JAN-1999; 99US-00240785.  
PR 25-JUN-1999; 99US-00344667.  
PR 26-APR-2000; 2000US-0200161P.  
PR 26-JUN-2000; 2000US-00603830.  
XX  
PA (NANO-) NANOSPHERE INC.  
PI Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JJ, Elghanian R,  
PI Taton TA;  
XX WPI; 2003-634854/60.  
XX  
PT Detection of nucleic acid having at least two portions, by contacting  
PT nucleic acid and nanoparticles under conditions, which allows  
PT hybridization of oligonucleotides on nanoparticles with at least two  
PT portions of nucleic acid.  
XX  
PS Example 18; Page 44; 108pp; English.  
XX  
CC This invention relates to a novel method for detecting nucleic acids. The  
CC method comprises providing nanoparticles with oligonucleotides attached  
CC to them, which have a sequence complementary to a sequence of two  
CC portions of nucleic acid, contacting the nucleic acid and nanoparticles  
CC to allow hybridization of the oligonucleotides with two or more portions  
CC of the nucleic acid, and observing a detectable change brought about by  
CC the hybridization. The nucleic acid to be detected must have at least two  
CC portions and the distances between these are chosen so that when the  
CC nanoparticle-oligonucleotide conjugate binds the target sequence a  
CC detectable change occurs. The method of the invention is useful for  
CC detecting two or more nucleic acids (from a biological source) having at  
CC least two portions, such as viral RNA, bacterial or fungal DNA, a gene  
CC associated with a disease, synthetic, or structurally- modified natural  
CC or synthetic RNA or DNA, or a product of a polymerase chain reaction  
CC amplification. Nanoparticle-oligonucleotide conjugates of the invention  
CC are useful for preparing a nanoprobe conjugate for detecting an analyte,  
CC and for detecting a nucleic acid bound to an electrode surface.  
CC Nanoparticles and nanoparticle conjugates of the invention are useful for  
CC nanofabrication and for separating a selected nucleic acid having two  
CC portions from other nucleic acids. Diagnostic assays employing  
CC nanoparticle-oligonucleotide conjugates improve the sensitivity of  
CC nucleic acid detection methods and can be used to detect nucleic acids  
CC that are present in only small amounts in a sample. The invention also  
CC provides highly desirable nanoparticle-oligonucleotide conjugates. These  
CC conjugates are stable with tailored hybridization abilities. The present  
CC sequence represents a thiol modified oligonucleotide sequence used to  
CC demonstrate the method of the invention  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAA 18  
XX  
RESULT 676  
ACD99851  
ID ACD99851 standard; DNA; 20 BP.  
XX  
AC ACD99851;  
XX  
DT 25-SEP-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #537.  
XX

KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
PF 29-MAR-2002; 2002US-00112653.  
XX  
XX 29-MAR-2001; 2001US-0279642P.  
XX  
PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
XX  
PI Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
PS Disclosure; Page 23; 229pp; English.  
XX  
CC The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAA 18  
XX  
RESULT 677  
ACD99847/C  
ID ACD99847 standard; DNA; 20 BP.  
XX  
AC ACD99847;  
XX  
DT 25-SEP-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #533.  
XX  
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
PF 29-MAR-2002; 2002US-00112653.  
XX  
XX 29-MAR-2001; 2001US-0279642P.  
XX

PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
XX  
PI Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
PS Disclosure; Page 23; 229pp; English.  
XX  
CC The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 1520 AAAAAAAAAAGTAAAA 1537  
Db 20 AAAAAAAAAAAAAAAAAA 3  
XX  
RESULT 678  
ACD99532/c  
ID ACD99532 standard; DNA; 20 BP.  
XX  
AC ACD99532;  
XX  
DT 25-SEP-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #218.  
XX  
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
XX  
PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
XX  
PE 29-MAR-2002; 2002US-00112653.  
XX  
PR 29-MAR-2001; 2001US-0279642P.  
XX  
PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
XX  
PI Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
PS Disclosure; Page 14; 229pp; English.  
XX  
CC The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of

CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 1520 AAAAAAAAAAGTAAAA 1537  
Db 20 AAAAAAAAAAAAAAAAAA 3  
XX  
RESULT 679  
ADA14838  
ID ADA14838 standard; DNA; 20 BP.  
XX  
AC ADA14838;  
XX  
DT 06-NOV-2003 (first entry)  
XX  
DE Hairpin target sequence, #2, used in an example of the invention.  
XX  
KW Hairpin sensor; hairpin loop; complementary probe; inverse repeat arm;  
KW quenchable fluorescing agent; microarray; semiconductor; nanocrystal;  
KW rhodamine B-labelled dye; detection; gold support; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT 1..20  
FT misc\_binding /\*tag = a  
FT /bound\_moiety= "Hairpin oligonucleotide #2"  
FT /note= "Forms a double-stranded region with the hairpin  
FT oligonucleotide shown in examples 3, 4 and 5"  
XX  
PN US2003013109-A1.  
XX  
PD 16-JAN-2003.  
XX  
PE 21-JUN-2002; 2002US-00176055.  
XX  
PR 21-JUN-2001; 2001US-0299460P.  
XX  
PA (BAL/) BALLINGER C T.  
PA (LOCA/) LOCASCIO M.  
PA (LAND/) LANDRY D P.  
XX  
PI Ballinger CT, Locascio M, Landry DP;  
XX  
DR WPI; 2003-596312/56.  
XX  
PT Hairpin sensor useful for detecting a target nucleotide sequence in a  
PT sample, comprises a hairpin loop assembly including a complementary probe  
PT and a quenchable fluorescing agent.  
XX  
PS Example 3; Page 11; 16pp; English.  
XX  
CC The invention discloses a hairpin sensor comprising a hairpin loop  
CC assembly including a complementary probe positioned between a first  
CC inverse repeat arm and a second inverse repeat arm, and a quenchable  
CC fluorescing agent joined, directly or indirectly, to the end of the  
CC second inverse repeat arm of the hairpin loop assembly opposite the  
CC complementary probe. Also claimed is a microarray comprising the hairpin  
CC sensor, where the end of the first inverse repeat arm opposite the  
CC complementary probe is bound, directly or indirectly, to a support, a kit  
CC for detecting a target nucleotide sequence in a sample comprising the  
CC hairpin sensor, and a support, and a hairpin sensor system, in which the

CC particle is conductive or semi-conductive, including at least one of the  
CC above hairpin sensor assemblies. The hairpin sensor further comprises a  
CC functional group joined to the end of the first inverse repeat arm  
CC opposite the complementary probe, or first spacer opposite the first  
CC inverse repeat arm, the functional group selected from amino, carboxyl,  
CC thiol and hydroxyl. Further, the sensor comprises a ligand positioned  
CC between the second inverse repeat arm and the quenchable fluorescing  
CC agent, where the ligand is selected from mercapto, hydroxyl, amino,  
CC nitrile and carboxyl, carboxylic acid, organic acid and amino acid. The  
CC second spacer is positioned between the second inverse repeat arm and the  
CC quenchable fluorescing agent which comprises a semiconductor nanocrystal  
CC or rhodamine B-labelled dye. Within the microarray the support is capable  
CC of accepting a charge. At least one hairpin sensor comprises two or more  
CC hairpin sensors. The two or more hairpin sensors include complementary  
CC fluorescing agents that are the same or different and respective quenchable  
CC hairpin sensors are arranged in a spatially-defined pattern. The two or more  
CC and system are useful for detecting a target nucleotide sequence in a  
CC sample. Further, the method involves identifying the target nucleotide  
CC sequence by the location of the complementary probe to which the target  
CC nucleotide sequence binds. The two or more hairpin sensors include  
CC complementary probes or quenchable fluorescing agents, that are  
CC different. The sequence presented is the hairpin oligonucleotide target  
CC sequence, #2, used in an example of the invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 4.4e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAA 1537

Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 680

ADA06159 ID ADA06159 standard; DNA; 20 BP.

XX ADA06159;

DT 06-NOV-2003 (first entry)

XX Nanoparticle labelled oligonucleotides, spacer DNA #2.

KW ss; nanoparticle; colloidal gold; semiconductor; nanomaterial;

KW nanostructure; viral disease; human immunodeficiency virus infection;

KW hepatitis virus infection; herpes virus infection;

KW cytomegalovirus virus infection; Epstein-Barr virus; bacterial disease;

KW sexually transmitted disease; inherited disorders; paternity testing;

KW cell line authentication; gene therapy.

XX Synthetic.

OS Synthetic.

XX US2003068622-A1.

PN 10-APR-2003.

PD 12-OCT-2001; 2001US-00976863.

PF 29-JUL-1996; 96US-0031809P.

PR 21-JUL-1997; 97WO-US012783.

PR 29-JAN-1999; 99US-00240755.

PR 25-JUN-1999; 99US-00344667.

PR 26-APR-2000; 2000US-0200161P.

PR 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

XX Mitkin CA, Letsinger RL, Mucic RC, Storchhoff JÜ, Elghanian R;

PI Taton TA;

XX

DR WP1; 2003-576420/54.

XX Detecting nucleic acids having at least 2 portions comprises use of

PT nanoparticles which have oligonucleotides attached to them that are

PT complementary to portions of the target nucleic acid sequence.

XX Example 18; Page 44; 130pp; English.

XX The invention relates to detecting a nucleic acid (NA) having at least 2

CC portions comprising providing a type of nanoparticles (NP, e.g. colloidal

CC gold) having oligonucleotides (O) attached (where (O) on each NP has a

CC sequence complementary to sequence of at least two portions of NA),

CC contacting NA and NP to allow hybridisation of (O) on NP with 2 or more

CC portions of NA, and observing a detectable change brought about by

CC hybridization of (O) on NP with NA. Also included are aggregate probes,

CC core probes, substrate having NP attached to it, a metallic or

CC semiconductor NP having (O) attached to it, nanomaterials/nanostructures

CC comprising nanoparticles and methods of nanofabrication utilising

CC nanoparticles and satellite probes. The methods, probes nucleic acids,

CC nanoparticles and oligonucleotides are useful for separating a selected

CC nucleic acid having at least two portions, from other nucleic acids, and

CC for detecting nucleic acids having at least two portions, for detecting

CC NA having at least two portions. The method is useful for detecting any

CC type of nucleic acids which may be used for diagnosis of disease and in

CC sequencing of nucleic acids. Preferably, the method is useful for

CC detecting nucleic acids for diagnosis and/or monitoring of viral diseases

CC (human immunodeficiency virus, hepatitis virus, herpes virus,

CC cytomegalovirus and Epstein-Barr virus), bacterial diseases, sexually

CC transmitted diseases, inherited disorders, in forensics, in DNA

CC monitoring, gene therapy, etc. The method is useful in research and

CC analytical laboratories in DNA sequencing, in the field to detect the

CC presence of specific pathogens, etc. Detecting nucleic acids based on

CC observing a colour change with the naked eye is cheap, fast, simple and

CC robust, and do not require specialised expensive equipment. The present

CC sequence is a spacer oligonucleotide used to illustrate the method of the

CC invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 4.4e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAA 1537

Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 681

ACD26995 ID ACD26995 standard; DNA; 20 BP.

XX ACD26995;

DT 15-OCT-2003 (first entry)

XX Nanotechnology nucleic acid detection method oligonucleotide #54.

KW Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.

XX Synthetic.

OS Synthetic.

XX Key Location/Qualifiers

FT modified\_base 1 /\*tag= a

FT /mod\_Base= OTHER

FT /note= "OTHER= Thiol modified" "

PN US2003049630-A1.

PD 13-MAR-2003.

XX



```

PR 20-SEP-2001; 2001US-00957318.
XX
XX 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US0212783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mitkin CA, Letsinger RU, Mucic RC, Storchoff JF, Elghamian R;
PI Taton TA;
DR WPI; 2003-615795/58.
XX
XX Detecting nucleic acid having two portions, by providing nanoparticles
PT having oligonucleotides attached to it, contacting nucleic acid and
PT nanoparticles to allow hybridization, and observing detectable change.
XX
PS Example 18; Page 43; 123pp; English.
XX
XX This invention relates to a novel method for detecting nucleic acids. The
CC method comprises providing nanoparticles with oligonucleotides attached
CC to them, which have a sequence complementary to a sequence of two
CC portions of nucleic acid, contacting the nucleic acid and nanoparticles
CC to allow hybridization of the oligonucleotides with two or more portions
CC of the nucleic acid, and observing a detectable change brought about by
CC the hybridisation. The nucleic acid to be detected must have at least two
CC portions and the distances between these are chosen so that when the
CC nanoparticle-oligonucleotide conjugate binds the target sequence a
CC detectable change occurs. The method of the invention is useful for
CC detecting two or more nucleic acids (from a biological source) having at
CC least two portions, such as viral RNA, bacterial or fungal DNA, a gene
CC associated with a disease, synthetic, or structurally-modified natural
CC or synthetic RNA or DNA, or a product of a polymerase chain reaction
CC amplification. Nanoparticle-oligonucleotide conjugates of the invention
CC are useful for preparing a nanoprobe conjugate for detecting an analyte,
CC and for detecting a nucleic acid bound to an electrode surface.
CC Nanoparticles and nanoparticle conjugates of the invention are useful for
CC nanofabrication and for separating a selected nucleic acid having two
CC portions from other nucleic acids. Diagnostic assays employing
CC nanoparticle-oligonucleotide conjugates improve the sensitivity of
CC nucleic acid detection methods and can be used to detect nucleic acids
CC that are present in only small amounts in a sample. The present sequence
CC represents a thiol modified oligonucleotide sequence used to demonstrate
CC the method of the invention
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0
QY 1520 AAAAAAAAAAATGAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18
XX
XX RESULT 682
ADB36933 ID ADB36933 standard; DNA; 20 BP.
XX
XX ADB36933;
AC
XX 04-DEC-2003 (first entry)
DT
XX
XX Immuno[m]ulatory nucleic acid #547.
DE
XX
XX des allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immuno[m]ulatory.
XX
XX Synthetic.
XS

```

```

XX XX US2003087848-A1.
XX
XX PD 08-MAY-2003.
XX
XX PE 02-FEB-2001; 2001US-00776479.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX XX (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PL Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2003-657977/62.
XX
XX PT Treating and/or preventing allergy or asthma using an immunostimulatory
XX PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX PS Disclosure; Page 13; 221pp; English.
XX
XX CC The invention relates to a method of treating or preventing allergy or
XX CC asthma which comprises administering to a subject a poly-G nucleic acid
XX CC in an aerosol formulation. The methods and compositions of the present
XX CC invention are useful for diagnosing and/or treating asthma and allergy
XX CC especially in a hypo-responsive subject. The present sequence represents
XX CC an immunostimulatory nucleic acid of the invention.
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4,4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 1 AAAAAAAAAAAAAAAAAA 18
XX
XX DB
XX
XX RESULT 683
XX ADB36601/C
XX ID ADB36601 standard; DNA; 20 BP.
XX
XX AC
XX AD ADB36601;
XX
XX DT 04-DEC-2003 (first entry)
XX
XX DE Immunostimulatory nucleic acid #215.
XX
XX dx; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX
XX OS Synthetic.
XX
XX PN US2003087848-A1.
XX
XX PD 08-MAY-2003.
XX
XX PF 02-FEB-2001; 2001US-00776479.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PL Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2003-657977/62.
XX
XX PT Treating and/or preventing allergy or asthma using an immunostimulatory
XX PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4,4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 1 AAAAAAAAAAAAAAAAAA 18
XX
XX DB
XX
XX RESULT 683
XX ADB36601/C
XX ID ADB36601 standard; DNA; 20 BP.
XX
XX AC
XX AD ADB36601;
XX
XX DT 04-DEC-2003 (first entry)
XX
XX DE Immunostimulatory nucleic acid #215.
XX
XX dx; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX
XX OS Synthetic.
XX
XX PN US2003087848-A1.
XX
XX PD 08-MAY-2003.
XX
XX PF 02-FEB-2001; 2001US-00776479.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PL Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2003-657977/62.
XX
XX PT Treating and/or preventing allergy or asthma using an immunostimulatory
XX PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4,4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 1 AAAAAAAAAAAAAAAAAA 18
XX
XX DB
XX
XX RESULT 683
XX ADB36601/C
XX ID ADB36601 standard; DNA; 20 BP.
XX
XX AC
XX AD ADB36601;
XX
XX DT 04-DEC-2003 (first entry)
XX
XX DE Immunostimulatory nucleic acid #215.
XX
XX dx; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX
XX OS Synthetic.
XX
XX PN US2003087848-A1.
XX
XX PD 08-MAY-2003.
XX
XX PF 02-FEB-2001; 2001US-00776479.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PL Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2003-657977/62.
XX
XX PT Treating and/or preventing allergy or asthma using an immunostimulatory
XX PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4,4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 1 AAAAAAAAAAAAAAAAAA 18
XX
XX DB
XX
XX RESULT 683
XX ADB36601/C
XX ID ADB36601 standard; DNA; 20 BP.
XX
XX AC
XX AD ADB36601;
XX
XX DT 04-DEC-2003 (first entry)
XX
XX DE Immunostimulatory nucleic acid #215.
XX
XX dx; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX
XX OS Synthetic.
XX
XX PN US2003087848-A1.
XX
XX PD 08-MAY-2003.
XX
XX PF 02-FEB-2001; 2001US-00776479.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PL Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2003-657977/62.
XX
XX PT Treating and/or preventing allergy or asthma using an immunostimulatory
XX PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4,4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 1 AAAAAAAAAAAAAAAAAA 18
XX
XX DB
XX
XX RESULT 683
XX ADB36601/C
XX ID ADB36601 standard; DNA; 20 BP.
XX
XX AC
XX AD ADB36601;
XX
XX DT 04-DEC-2003 (first entry)
XX
XX DE Immunostimulatory nucleic acid #215.
XX
XX dx; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX
XX OS Synthetic.
XX
XX PN US2003087848-A1.
XX
XX PD 08-MAY-2003.
XX
XX PF 02-FEB-2001; 2001US-00776479.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PL Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2003-657977/62.
XX
XX PT Treating and/or preventing allergy or asthma using an immunostimulatory
XX PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4,4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 1 AAAAAAAAAAAAAAAAAA 18
XX
XX DB
XX
XX RESULT 683
XX ADB36601/C
XX ID ADB36601 standard; DNA; 20 BP.
XX
XX AC
XX AD ADB36601;
XX
XX DT 04-DEC-2003 (first entry)
XX
XX DE Immunostimulatory nucleic acid #215.
XX
XX dx; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX
XX OS Synthetic.
XX
XX PN US2003087848-A1.
XX
XX PD 08-MAY-2003.
XX
XX PF 02-FEB-2001; 2001US-00776479.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PL Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2003-657977/62.
XX
XX PT Treating and/or preventing allergy or asthma using an immunostimulatory
XX PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4,4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 1 AAAAAAAAAAAAAAAAAA 18
XX
XX DB
XX
XX RESULT 683
XX ADB36601/C
XX ID ADB36601 standard; DNA; 20 BP.
XX
XX AC
XX AD ADB36601;
XX
XX DT 04-DEC-2003 (first entry)
XX
XX DE Immunostimulatory nucleic acid #215.
XX
XX dx; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX
XX OS Synthetic.
XX
XX PN US2003087848-A1.
XX
XX PD 08-MAY-2003.
XX
XX PF 02-FEB-2001; 2001US-00776479.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PL Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2003-657977/62.
XX
XX PT Treating and/or preventing allergy or asthma using an immunostimulatory
XX PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4,4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1520 AAAAAAAAAAAGTAAA 1537
XX |||||
XX 1 AAAAAAAAAAAAAAAAAA 18
XX
XX DB
XX
XX RESULT 683
XX ADB36601/C
XX ID ADB36601 standard; DNA; 20 BP.
XX
XX AC
XX AD ADB36601;
XX
XX DT 04-DEC-2003 (first entry
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```
XX Disclosure; Page 8; 221pp; English.
PS
XX
CC The invention relates to a method of treating or preventing allergy or
CC asthma which comprises administering to a subject a poly-G nucleic acid
CC in an aerosol formulation. The methods and compositions of the present
CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAA 1537
   |||||
Db 20 AAAAAAAAAAAAAAAAAA 3

RESULT 684
ADB36929/C
ID ADB36929 standard; DNA; 20 BP.
XX
AC ADB36929;
XX
DT 04-DEC-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #543.
XX
KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immunostimulatory.
XX
OS Synthetic.
XX
FN US2003087848-A1.
XX
PD 08-MAY-2003.
XX
PF 02-FEB-2001; 2001US-00776479.
XX
PR 03-FEB-2000; 2000US-0179991P.
XX
PA (BRAT/) BRATZLER R L.
PA (PETE/) PETERSEN D M.
PA (FOUR/) FOURON Y.
XX
PI Bratzler RL, Petersen DM, Fouron Y;
XX
DR WPI; 2003-657977/62.
XX
PT Treating and/or preventing allergy or asthma using an immunostimulatory
PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
PS
XX Disclosure; Page 13; 221pp; English.
XX
CC The invention relates to a method of treating or preventing allergy or
CC asthma which comprises administering to a subject a poly-G nucleic acid
CC in an aerosol formulation. The methods and compositions of the present
CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAA 1537
   |||||
Db 20 AAAAAAAAAAAAAAAAAA 3
```

```
RESULT 685
ADC98404
ID ADC98404 standard; DNA; 20 BP.
XX
AC ADC98404;
XX
DT 01-JAN-2004 (first entry)
XX
DE ITGA12 polymorphism marker PCR primer S primer seq.
XX
KW low bone mineral density; BMD; bone damage; polymorphism; osteoporosis;
KW single nucleotide polymorphism; SNP; PCR primer; ss; human.
XX
OS Synthetic.
XX
FN Homo sapiens.
XX
PN M02003054218-A2.
XX
PD 03-JUL-2003.
XX
PF 19-DEC-2002; 2002MO-US040948.
XX
PR 20-DEC-2001; 2001US-0342711P.
XX
PR 04-NOV-2002; 2002US-0423559P.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Jones KA, Valdes A, Townley DJ, Mangion J, Galwey N, Bennett S;
PI McKay I, Schafer A;
XX
DR WPI; 2003-559156/52.
XX
PT Determining whether an individual is predisposed to susceptibility to low
PT bone mineral density (BMD) and/or bone damage, involves identifying
PT polymorphisms in associated genes.
XX
PS Example 8; Page 237; 246pp; English.
XX
CC The present invention describes a method of determining whether an
CC individual is predisposed to susceptibility to low bone mineral density
CC (BMD) and/or bone damage comprising identifying whether the individual
CC has at least one polymorphism in a polynucleotide encoding a protein,
CC where the polynucleotide is one of 81 200-500 nucleotide sequences (51,
CC see ADC98235 to ADC98315). An agent identified in an method from the
CC present invention which can be used for the prevention or treatment of a
CC disease resulting in susceptibility to low BMD and/or bone damage is
CC useful in the manufacture of a medicament for use in modulating the
CC susceptibility to low BMD and/or bone damage. The disease associated with
CC low BMD and/or bone damage is osteoporosis. The present PCR primer
CC sequence is used in the exemplification of the present invention.
XX
SQ Sequence 20 BP; 2 A; 0 C; 2 G; 16 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1246 TCTTGTTTGGTTTAA 1263
   |||||
Db 3 TTTTATTGTTTAA 20

RESULT 686
ADE28908/C
ID ADE28908 standard; DNA; 20 BP.
XX
AC ADE28908;
XX
DT 29-JAN-2004 (first entry)
XX
DE Reverse Ag6858 RT-PCR primer used to amplify human NOV RNA.
```

XX NOVX; antidiabetic; anorectic; cardiant; hypotensive;  
KM antiarteriosclerotic; vlnucide; antibacterial; fungicide; protozoacide;  
KM nootropic; neuroprotective; antiparkinsonian; anticonvulsant;  
KM osteopathic; antiarthritic; antiinflammatory; dermatological;  
KM antiathermatic; antilipemic; metabolic; diabetes; obesity; infectious;  
KM anorexia; cancer; cardiovascular; hypertension; atherosclerosis;  
KM neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune;  
KM osteoarthritis; haemopoietic; inflammatory skin; asthma; dyslipidaemia;  
KM neurogenesis; cell differentiation; proliferation; haemopoiesis;  
KM wound healing; angiogenesis; gene therapy; chromosome mapping;  
KM tissue typing; human; NOV; PCR; primer; ss; RT-PCR.  
XX  
XX Homo sapiens.  
XX  
XX MO2003040330-A2.  
XX  
XX 15-MAY-2003.  
XX  
XX 05-NOV-2002; 2002MO-US035536.  
XX  
XX 05-NOV-2001; 2001US-0338626P.  
PR 05-DEC-2001; 2001US-0336600P.  
PR 07-DEC-2001; 2001US-0338285P.  
PR 12-DEC-2001; 2001US-0341346P.  
PR 17-DEC-2001; 2001US-0341477P.  
PR 17-DEC-2001; 2001US-0341540P.  
PR 20-DEC-2001; 2001US-0342592P.  
PR 27-DEC-2001; 2001US-0344297P.  
PR 31-DEC-2001; 2001US-0344903P.  
PR 17-APR-2002; 2002US-0373288P.  
PR 15-MAY-2002; 2002US-0380981P.  
PR 17-MAY-2002; 2002US-0381495P.  
PR 28-MAY-2002; 2002US-0383533P.  
PR 28-MAY-2002; 2002US-0383744P.  
PR 29-MAY-2002; 2002US-0383829P.  
PR 29-MAY-2002; 2002US-0384024P.  
PR 07-AUG-2002; 2002US-0401788P.  
PR 26-AUG-2002; 2002US-0406353P.  
PR 31-OCT-2002; 2002US-00287971.  
XX  
XX (CURA-) CURAGEN CORP.  
XX  
XX Alabrook JP, Alvarez E, Anderson DW, Baron M, Boldog FI;  
PI Burgess CE, Caeman SJ, Chapoval A, Dhanabal M, Edinger SR, Eisen A;  
PI Ellerman K, Ettenberg S, Gangoli EA, Gerlach VL, Gorman L;  
PI Grose WM, Guo X, Hackett C, Ji W, Kekuda R, Khramtsov NV;  
PI Lepley DM, Li L, Macdougall JR, Malyskar UM, Mazur A, McQueney K;  
PI Mezes PS, Miller CE, Millet I, Mishra VS, Padigaru M, Patirajan M;  
PI Pena CBA, Payman JA, Raetelli L, Rieger DK, Shenoy SG, Shimkets RA;  
PI Smithson G, Sterling G, Spytek KA, Stone DJ, Tchernev VT, Twonlow N;  
PI Vermet CAM, Zernusen BD, Zhong M;  
XX  
XX WPI; 2003-441555/41.  
XX  
XX New isolated NOVX polypeptides and polynucleotides, useful for  
PT preventing, diagnosing or treating NOVX-associated disorders, e.g.  
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,  
PT asthma, or infections.  
XX  
XX Example C; SEQ ID NO 285; 447pp; English.  
XX  
XX The invention relates to a novel isolated NOVX polypeptide. The  
CC polypeptide of the invention demonstrates, antidiabetic, anorectic,  
CC cardiant, hypotensive, antiarteriosclerotic, vlnucide, antibacterial,  
CC fungicide, protozoacide, nootropic, neuroprotective, antiparkinsonian,  
CC anticonvulsant, osteopathic, antiarthritic, antiinflammatory, the  
CC dermatological, antiathermatic and antilipemic activities. The  
CC polypeptides, nucleic acid molecules and antibodies may be useful for  
CC treating or diagnosing diseases including metabolic disorders such as  
CC diabetes and obesity, infectious diseases, anorexia, cancer,  
CC cardiovascular diseases including hypertension and atherosclerosis,  
CC neurodegenerative disorders such as Alzheimer's disease, Parkinson's

CC disease and epilepsy, immune disorders e.g. osteoarthritis, haemopoietic  
CC disorders, inflammatory skin disorders, asthma and dyslipidaemia.  
CC Furthermore, the nucleic acids and polypeptides may also be used to  
CC identify molecules that modulate or inhibit neurogenesis, cell  
CC differentiation and proliferation, haemopoiesis, wound healing and  
CC angiogenesis, as well as in gene therapy. Finally, the nucleic acids may  
CC be used as hybridisation probes, in chromosome mapping, tissue typing,  
CC preventive medicine and pharmacogenomics. The current sequence is that of  
CC the RT-PCR primer which was used within the exemplification of the  
CC invention.  
XX  
XX Sequence 20 BP, 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;  
XX  
XX  
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
XX 330 GTTCCCAAGAGCTCTG 347  
Db 19 GTGTACCAAGAGCTCTG 2  
XX  
XX  
XX RESULT 687  
ADES2460/C  
ID ADES2460 standard; DNA; 20 BP.  
XX  
XX ADES2460;  
AC  
XX 29-JAN-2004 (first entry)  
DT  
XX  
XX Stem cell factor (SCF) related DNA #31.  
DB  
XX  
XX Stem cell factor; SCF; haematopoietic activity; infertility;  
KM intestinal damage; myeloproliferative disorder; leucopenia;  
KM thrombocytopenia; anaemia; bone marrow transplant; immune deficiency;  
KM neoplasia; nerve damage; osteoporosis; metastatic carcinoma; leukaemia;  
KM myelary tuberculosis; haematopoietic progenitor cell; ss.  
XX  
XX Synthetic.  
OS  
XX US2002031491-A1.  
XX  
XX 14-MAR-2002.  
PD  
XX  
XX 31-DEC-1998; 98US-00224683.  
PP  
XX  
XX 16-OCT-1989; 89US-00422383.  
PR 11-JUN-1990; 90US-00537198.  
PR 24-AUG-1990; 90US-00573616.  
PR 01-OCT-1990; 90US-00589701.  
PR 10-APR-1991; 91US-00684535.  
PR 25-NOV-1992; 92US-00982255.  
PR 21-DEC-1993; 93US-00172329.  
PR 24-MAY-1995; 95US-00449653.  
PR 12-JAN-1998; 98US-00005893.  
XX  
XX (ZSEB/) ZSEBO K M.  
PA (BOSS/) BOSSSELMAN R A.  
PA (SUGG/) SUGGS S V.  
PA (MART/) MARTIN F H.  
XX  
XX Zaebo KM, Bosselman RA, Suggs SV, Martin FH;  
XX  
XX WPI; 2003-851459/79.  
XX  
XX New non-natural stem cell factor, useful for treating e.g. leucopenia or  
PT immune deficiency, also related nucleic acid and antibodies.  
XX  
XX Disclosure; SEQ ID NO 32; 217pp; English.  
XX  
XX The invention relates to stem cell factor (SCF) polypeptides with  
CC haematopoietic activity and the polynucleotides encoding them. The  
CC polypeptides are used for treating infertility, intestinal damage,

CC myeloproliferative disorders, leucopenia, thrombocytopenia or anaemia,  
 CC for improving engraftment of bone marrow transplants, for enhancing bone  
 CC marrow recovery after radiotherapy or chemotherapy and in treatment of  
 CC immune deficiency, neoplasia, nerve damage, osteoporosis, metastatic  
 CC carcinoma, leukaemia and military tuberculosis. The SCF polypeptides are  
 CC also used to expand haematopoietic progenitor cells for transplantation  
 CC and to prepare such cells for transfection with a gene. The SCF  
 CC polynucleotides can be used for recombinant expression of the  
 CC polypeptides and also as probes for mapping of the SCF gene, for  
 CC identifying SCF-related diseases and as a marker for neighbouring genes.  
 CC Antibodies raised against the polypeptides are useful in diagnosis and to  
 CC remove SCF from blood. This sequence represents SCF related DNA of the  
 CC invention.

XX  
 SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
 |||||  
 18 AAAAAAAAAAAAAAAAAA 1

Db

RESULT 688  
 ADE52462/c  
 ID ADE52462 standard; DNA; 20 BP.  
 XX  
 AC ADE52462;  
 XX  
 DT 29-JAN-2004 (first entry)  
 XX  
 DE Stem cell factor (SCF) related DNA #33.  
 XX  
 KW Stem cell factor; SCF; haematopoietic activity; infertility;  
 KW intestinal damage; myeloproliferative disorder; leucopenia;  
 KW thrombocytopenia; anaemia; bone marrow transplant; immune deficiency;  
 KW neoplasia; nerve damage; osteoporosis; metastatic carcinoma; leukaemia;  
 KW military tuberculosis; haematopoietic progenitor cell; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN US202031491-A1.  
 XX  
 PD 14-MAR-2002.  
 XX  
 PF 31-DEC-1998; 98US-00224683.  
 XX  
 PR 16-OCT-1989; 89US-00422383.  
 PR 11-JUN-1990; 90US-00537198.  
 PR 24-AUG-1990; 90US-00573616.  
 PR 01-OCT-1990; 90US-00589701.  
 PR 10-APR-1991; 91US-00684535.  
 PR 25-NOV-1992; 92US-00982255.  
 PR 21-DEC-1993; 93US-00172329.  
 PR 24-MAY-1995; 95US-00449653.  
 PR 12-JAN-1998; 98US-00005893.  
 XX  
 PA (ZSEB/) ZSEBO K M.  
 PA (BOSS/) BOSSELMAN R A.  
 PA (SUGS/) SUGGS S V.  
 PA (MART/) MARTIN F H.  
 XX  
 PI Zeebo KM, Bosseelman RA, Suggs SV, Martin FH;  
 XX  
 DR WPI; 2003-851459/79.  
 XX  
 PT New non-natural stem cell factor, useful for treating e.g. leucopenia or  
 PT immune deficiency, also related nucleic acid and antibodies.  
 XX  
 CS Disclosure; SEQ ID NO 34; 217pp; English.  
 XX

CC The invention relates to stem cell factor (SCF) polypeptides with  
 CC haematopoietic activity and the polynucleotides encoding them. The  
 CC polypeptides are used for treating infertility, intestinal damage,  
 CC myeloproliferative disorders, leucopenia, thrombocytopenia or anaemia,  
 CC for improving engraftment of bone marrow transplants, for enhancing bone  
 CC marrow recovery after radiotherapy or chemotherapy and in treatment of  
 CC immune deficiency, neoplasia, nerve damage, osteoporosis, metastatic  
 CC carcinoma, leukaemia and military tuberculosis. The SCF polypeptides are  
 CC also used to expand haematopoietic progenitor cells for transplantation  
 CC and to prepare such cells for transfection with a gene. The SCF  
 CC polynucleotides can be used for recombinant expression of the  
 CC polypeptides and also as probes for mapping of the SCF gene, for  
 CC identifying SCF-related diseases and as a marker for neighbouring genes.  
 CC Antibodies raised against the polypeptides are useful in diagnosis and to  
 CC remove SCF from blood. This sequence represents SCF related DNA of the  
 CC invention.

XX  
 SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
 |||||  
 18 AAAAAAAAAAAAAAAAAA 1

Db

RESULT 689  
 ADF09421  
 ID ADF09421 standard; DNA; 20 BP.  
 XX  
 AC ADF09421;  
 XX  
 DT 12-FEB-2004 (first entry)  
 XX  
 DE Linking oligonucleotide #55.  
 XX  
 KW Linking oligonucleotide; ss; nucleic acid detection;  
 KW nanoparticle-oligonucleotide conjugate.  
 XX  
 OS Synthetic.  
 XX  
 PN US2003148282-A1.  
 XX  
 PD 07-AUG-2003.  
 XX  
 PF 12-OCT-2001; 2001US-00976968.  
 XX  
 PR 29-JUL-1996; 96US-0031809P.  
 PR 21-JUL-1997; 97WO-US012783.  
 PR 29-JAN-1999; 99US-00240755.  
 PR 25-JUN-1999; 99US-00344667.  
 PR 26-APR-2000; 2000US-0200161P.  
 PR 26-JUN-2000; 2000US-00603830.  
 XX  
 PA (NANO-) NANOSPHERE INC.  
 XX  
 PI Markin CA, Letsinger RL, Mucic RC, Storchhoff JF, Elghamian R;  
 PI Taton TA;  
 XX  
 DR WPI; 2003-897536/82.  
 XX  
 PT Detection of nucleic acid having at least two portions comprises  
 PT contacting the nucleic acid and nanoparticles under conditions to allow  
 PT hybridization of the oligonucleotides, and observing detectable change  
 PT brought by hybridization.  
 XX  
 PS Example 18; SEQ ID NO 55; 129pp; English.  
 XX  
 CS The invention relates to a method of detecting a nucleic acid with at  
 CC least two portions by providing a type of nanoparticle-oligonucleotide  
 CC conjugate, contacting the nucleic acid and nanoparticles to allow

```
CC hybridisation of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. This sequence represents a linking
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy      1520 AAAAAAAAAAAGTAAAA 1537
      |||||
Db      1 AAAAAAAAAAAAAAAAAA 18

RESULT 690
ADF65655
ID ADF65655 standard; DNA; 20 BP.
XX
AC ADF65655;
XX
DT 12-FEB-2004 (first entry)
XX
DE Nanotechnology nucleic acid detection method associated #54.
XX
KW Linking oligonucleotide; ss; nucleic acid detection;
KW nanoparticle-oligonucleotide conjugate.
XX
OS Synthetic.
XX
PN US2002146720-A1.
XX
PD 10-OCT-2002.
XX
PF 20-SEP-2001; 2001US-00961949.
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
PA (NANO-) NANOSPHERE INC.
XX
PI Mitkin CA, Letsinger RL, Mucic RC, Storchhoff JT, Elghanian R;
PI Taton TA;
XX
DR WPI; 2003-174167/17.
XX
PT Detecting nucleic acid having two portions, by providing nanoparticles
PT having oligonucleotides attached to it, contacting nucleic acid and
PT nanoparticles to allow hybridization, and observing detectable change.
XX
PS Example 18; SEQ ID NO 55; 130pp; English.
XX
CC The invention relates to a method of detecting a nucleic acid with at
CC least two portions by providing a type of nanoparticle-oligonucleotide
CC conjugate, contacting the nucleic acid and nanoparticles to allow
CC hybridisation of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. This sequence represents a linking
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
```

```
Query Match      1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy      1520 AAAAAAAAAAAGTAAAA 1537
      |||||
Db      1 AAAAAAAAAAAAAAAAAA 18

RESULT 691
AAD64709
ID AAD64709 standard; DNA; 20 BP.
XX
AC AAD64709;
XX
DT 12-FEB-2004 (first entry)
XX
DE Coadsorbed diluent thiol modified oligonucleotide.
XX
KW Nanoparticle; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note="Labelled with thiol group"
XX
PN US2003180783-A1.
XX
PD 25-SEP-2003.
XX
PF 09-APR-2003; 2003US-00410324.
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-JUN-2000; 2000US-00603830.
PR 20-SEP-2001; 2001US-00961949.
XX
PA (NANO-) NANOSPHERE INC.
XX
PI Mitkin CA, Letsinger RL, Mucic RC, Storchhoff JT, Elghanian R;
PI Taton TA;
XX
DR WPI; 2003-863931/80.
XX
PT Detection of nucleic acid with two portions comprises providing
PT nanoparticles having oligonucleotides, contacting nucleic acid and
PT nanoparticles to allow hybridization of oligonucleotides on
PT nanoparticles, and observing detectable change.
XX
PS Example 18; SEQ ID NO 55; 0pp; English.
XX
CC The present invention relates to methods of detecting nucleic acids
CC whether natural or synthetic and whether modified or unmodified. The
CC invention also relates to materials for detecting nucleic acids and to
CC methods of separating a selected nucleic acid from other nucleic acids.
CC The invention is useful for detecting nucleic acid having at least 2
CC portions. The present sequence is an oligonucleotide used to synthesise
CC and purify fluorescein labelled oligonucleotides
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy      1520 AAAAAAAAAAAGTAAAA 1537
      |||||
Db      1 AAAAAAAAAAAAAAAAAA 18
```

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RESULT 692
ADP65590
ID ADF65590 standard; DNA; 20 BP.
XX
AC ADF65590;
XX
DT 12-FEB-2004 (first entry)
XX
DE Nanotechnology nucleic acid detection method associated #54.
XX
KM Linking oligonucleotide; ss; nucleic acid detection;
KM nanoparticle-oligonucleotide conjugate.
XX
OS Synthetic.
XX
PN US2003124528-A1.
XX
PD 03-JUL-2003.
XX
PF 12-OCT-2001; 2001US-00976601.
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
PA (NANO-) NANOSPHERE INC.
XX
PI Mirkin CA, Letsinger RL, Mucic RC, Sornhoff JT, Elghanian R;
PI Taton TA;
XX
XX WPI; 2003-810979/76.
XX
PT Detection of nucleic acid useful for, e.g. research and analytical
PT laboratories in deoxyribonucleic acid sequencing, comprises contacting
PT nucleic acid with at least two types of nanoparticles attached with
PT oligonucleotides.
XX
XX Example 18; SEQ ID NO 55; 130pp; English.
XX
CC The invention relates to a method of detecting a nucleic acid with at
CC least two portions by providing a type of nanoparticle-oligonucleotide
CC conjugate, contacting the nucleic acid and nanoparticles to allow
CC hybridisation of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. This sequence represents a linking
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1520 AAAAAAAAAAATAAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18
XX
RESULT 693
ADG32620
ID ADG32620 standard; DNA; 20 BP.
XX
AC ADG32620;
XX
DT 26-FEB-2004 (first entry)
XX

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```

XX
DE Murine TRPV transcript PCR primer SeqID 75.
XX
KM mouse; murine; PCR; ss; vanilloid receptor; VR; pain perception; TRPV3;
KM VR1S; VR1X; VR4; TRPV7; TRPV4; VR13; OTRPC4; TRPM8; TRPX; TrkA+;
KM inflammation; skin disorder; cancer; analgesic; antiinflammatory;
KM dermatological; cytostatic; primer.
XX
OS Mus musculus.
XX
PN WO2002101045-A2.
XX
PD 19-DEC-2002.
XX
PF 13-JUN-2002; 2002WO-EP006520.
XX
PR 13-JUN-2001; 2001US-0297835P.
PR 22-JAN-2002; 2002US-0351238P.
PR 29-JAN-2002; 2002US-0352914P.
PR 12-FEB-2002; 2002US-0357161P.
PR 15-MAY-2002; 2002US-0381086P.
PR 16-MAY-2002; 2002US-0381739P.
XX
PA (NOVS ) NOVARTIS AG.
PA (TRM1-) TRM LLC.
XX
PI Patapoutian A, Song C, Ganju P, Peler A, McIntyre P, Bevan S;
XX
DR WPI; 2003-156962/15.
XX
XX New isolated TRPV3, TRPV4 or TRPM8 vanilloid receptor nucleic acid
PT molecule and polypeptides, useful for the diagnosis and treatment of
PT disorders such as pain, inflammation, skin diseases and cancer.
XX
XX Example 1; SEQ ID NO 75; 197pp; English.
XX
PS This invention relates to novel vanilloid receptor (VR) related nucleic
CC acids and encoded proteins thereof. Specifically, it refers to certain
CC members of the VR family that are involved in pain perception, in
CC particular, TRPV3 (previously known as VR1S, VR1X, VR4 & TRPV7). TRPV4
CC (previously known as VR13 & OTRPC4) and TRPM8 (previously known as TRPX).
CC Furthermore, this invention includes trkA+ pain specific genes expressed
CC in the sensory neurons of the dorsal root ganglia. Accordingly, such
CC compositions can be useful for the diagnosis, treatment and prevention of
CC pain, inflammation, skin disorders and cancer, and so exhibit analgesic,
CC antiinflammatory, dermatological and cytostatic activities. This
CC oligonucleotide sequence is a PCR primer used to amplify the murine TRPV3
CC DNA of the invention.
XX
SQ Sequence 20 BP; 0 A; 3 C; 6 G; 11 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 722 GTTTGCTGTTGCTGCG 739
Db 3 GTTTGCTGTTGCTGCG 20
XX
RESULT 694
ADH59608/c
ID ADH59608 standard; DNA; 20 BP.
XX
AC ADH59608;
XX
DT 25-MAR-2004 (first entry)
XX
DE Non-nucleotide probe of the invention #12.
XX
KM non-nucleotide probe; Bacterial Artificial Chromosome clone; BAC; ss;
KM probe.
XX

```

OS Synthetic.  
XX  
XX WO2003027328-A2.  
XX  
PD 03-APR-2003.  
XX  
XX 24-SEP-2002; 2002WO-US030573.  
XX  
XX 24-SEP-2001; 2001US-0324499P.  
XX  
XX (BOST-) BOSTON PROBS INC.  
XX (DAKO-) DAKOCYTOMATION DENMARK AS.  
XX  
XX Kirtsen NV, Hyldig-Nielsen JU, Williams BF,  
XX WPI, 2003-421160/39.  
XX  
XX Non-nucleotide probe for suppressing binding of detectable nucleic acid  
XX PT probes to undesired sequences, has aggregate nucleobase sequence  
XX PT homologous to randomly distributed repeat sequence of genomic nucleic  
XX acid.  
XX  
XX Claim 10; SEQ ID NO 14; 103pp; English.  
XX  
XX The present sequence represents a non-nucleotide probe. The probe is  
XX useful for suppressing the binding of one or more detectable nucleic acid  
XX probes, that are greater than 100 base pairs and that have been derived  
XX from genomic nucleic acid, to one or more undesired sequences in an assay  
XX for determining target genomic nucleic acid of a sample. The method  
XX comprises contacting the sample with the mixture of probes (preferably  
XX comprising 5-50 probes), contacting the sample with the one or more  
XX detectable nucleic acid probes, and determining the target genomic  
XX nucleic acid of the sample by determining the hybridization of the one or  
XX more detectable nucleic acid probes to the target genomic nucleic acid of  
XX the sample. The genomic nucleic acid is contained in a fixed tissue or a  
XX cell, and the sample is metaphase spreads, interphase nucleic or nucleic  
XX found in paraffin embedded tissue material or frozen tissue sections. The  
XX probe is also useful in comparing a sample of genomic nucleic acid with  
XX that of a control sample using a genomic nucleic acid reference array.  
XX The method comprises treating a sample of genomic nucleic acid and  
XX control genomic nucleic acid, which are differentially labelled, the  
XX array or both the sample and control genomic nucleic acid and the array  
XX with the mixture of the probe under suitable hybridization conditions,  
XX contacting the array with treated mixture of sample and control genomic  
XX nucleic acid under suitable hybridization conditions, and comparing the  
XX intensities of the signals from the differential labels of the array to  
XX that caused by hybridization of the probes to genomic nucleic acid, thus  
XX determining one or more variations in copy numbers of sequences in the  
XX sample as compared with the relative copy numbers of substantially  
XX identical sequences in the control. The hybridization of the genomic  
XX array is determined using an intercalating dye or a detectable antibody,  
XX or its fragment, that is specific for a nucleic acid/nucleic acid hybrid.  
XX The sample of genomic nucleic acid to be tested and the reference of  
XX nucleic acid are labelled with detectable moiety such that hybridization  
XX of the genomic array is determined by determining the presence, absence,  
XX amount or location of the detectable label on the one or more genomic  
XX arrays. The genomic array comprises nucleic acid that is prepared from  
XX Bacterial Artificial Chromosome (BAC) clones. The present sequence  
XX represents a non-nucleotide probe of the invention.  
XX  
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 1520 AAAAAAAAAAGTAAA 1537  
Db 20 AAAAAAAAAAAAAAAAAA 3

ID ADH59620 standard; DNA; 20 BP.  
XX  
XX ADH59620;  
XX  
XX 25-MAR-2004 (first entry)  
XX  
XX Non-nucleotide probe of the invention #24.  
XX  
XX Non-nucleotide probe; Bacterial Artificial Chromosome clone; BAC; ss;  
XX probe.  
XX  
XX Synthetic.  
XX  
XX WO2003027328-A2.  
XX  
XX 03-APR-2003.  
XX  
XX 24-SEP-2002; 2002WO-US030573.  
XX  
XX 24-SEP-2001; 2001US-0324499P.  
XX  
XX (BOST-) BOSTON PROBS INC.  
XX (DAKO-) DAKOCYTOMATION DENMARK AS.  
XX  
XX Kirtsen NV, Hyldig-Nielsen JU, Williams BF,  
XX WPI, 2003-421160/39.  
XX  
XX Non-nucleotide probe for suppressing binding of detectable nucleic acid  
XX PT probes to undesired sequences, has aggregate nucleobase sequence  
XX PT homologous to randomly distributed repeat sequence of genomic nucleic  
XX acid.  
XX  
XX Claim 10; SEQ ID NO 26; 103pp; English.  
XX  
XX The present sequence represents a non-nucleotide probe. The probe is  
XX useful for suppressing the binding of one or more detectable nucleic acid  
XX probes, that are greater than 100 base pairs and that have been derived  
XX from genomic nucleic acid, to one or more undesired sequences in an assay  
XX for determining target genomic nucleic acid of a sample. The method  
XX comprises contacting the sample with the mixture of probes (preferably  
XX comprising 5-50 probes), contacting the sample with the one or more  
XX detectable nucleic acid probes, and determining the target genomic  
XX nucleic acid of the sample by determining the hybridization of the one or  
XX more detectable nucleic acid probes to the target genomic nucleic acid of  
XX the sample. The genomic nucleic acid is contained in a fixed tissue or a  
XX cell, and the sample is metaphase spreads, interphase nucleic or nucleic  
XX found in paraffin embedded tissue material or frozen tissue sections. The  
XX probe is also useful in comparing a sample of genomic nucleic acid with  
XX that of a control sample using a genomic nucleic acid reference array.  
XX The method comprises treating a sample of genomic nucleic acid and  
XX control genomic nucleic acid, which are differentially labelled, the  
XX array or both the sample and control genomic nucleic acid and the array  
XX with the mixture of the probe under suitable hybridization conditions,  
XX contacting the array with treated mixture of sample and control genomic  
XX nucleic acid under suitable hybridization conditions, and comparing the  
XX intensities of the signals from the differential labels of the array to  
XX that caused by hybridization of the probes to genomic nucleic acid, thus  
XX determining one or more variations in copy numbers of sequences in the  
XX sample as compared with the relative copy numbers of substantially  
XX identical sequences in the control. The hybridization of the genomic  
XX array is determined using an intercalating dye or a detectable antibody,  
XX or its fragment, that is specific for a nucleic acid/nucleic acid hybrid.  
XX The sample of genomic nucleic acid to be tested and the reference of  
XX nucleic acid are labelled with detectable moiety such that hybridization  
XX of the genomic array is determined by determining the presence, absence,  
XX amount or location of the detectable label on the one or more genomic  
XX arrays. The genomic array comprises nucleic acid that is prepared from  
XX Bacterial Artificial Chromosome (BAC) clones. The present sequence  
XX represents a non-nucleotide probe of the invention.  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

	Query Match	1.1%;	Score 14.8;	DB 1.	Length 20;
	Best Local Similarity	68.9%;	Pred. No. 4.4e+02;		
	Matches 16;	Conservative 0;	Mismatches 2;	Indels 0;	Gaps 0;
QY	1520 AAAAAAAAAAAGTAAAA	1537			
Dd	1 AAAAAAAAAAAAAAAAAA	18			

XX	AB288267	standard; DNA; 20 BP.
XX	AB288267;	
XX	17-OCT-2003	(first entry)
XX	Human oligonucleotide sequence.	
XX	Human; antisense; lung dysfunction; nasal airway dysfunction;	
XX	antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;	
XX	antisthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;	
XX	adenosine gene therapy; respiratory; lung; adenosine sensitivity;	
XX	adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;	
XX	lung inflammation; respiratory disease; ds.	
XX	Homo sapiens.	
XX	WO2002085308-A2.	
XX	31-OCT-2002.	
XX	23-APR-2002; 2002WO-US013135.	
XX	24-APR-2001; 2001US-0286137P.	
XX	(EPig-) EPIGENESIS PHARM INC.	
XX	NVCE JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;	
XX	Miller S, Tang L, Shahbuddin S;	
XX	WPI; 2003-229219/22.	
XX	Pharmaceutical composition for treating ailments associated with impaired	
XX	respiration, has oligo(s) antisense to specific gene(s) or its	
XX	corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or	
XX	ubiquinone.	
XX	Disclosure; SEQ ID NO 3509; 872bp; English.	
XX	The invention relates to a novel pharmaceutical composition, which has a	
XX	first active agent comprising an oligonucleotide antisense to the	
XX	initiation codon, coding region, 5' or 3' end genomic flanking regions,	
XX	5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of	
XX	junctions of genes encoding a polypeptide associated with lung and/or	
XX	nasal airway dysfunction and a second active agent comprising an	
XX	antiinflammatory steroid and ubiquinone. A composition of the invention	
XX	has antiinflammatory, antiallergic, antisthmatic, hypotensive,	
XX	immunosuppressive, and cyostatic activity. The composition may have a	
XX	use in antisense gene therapy. The composition is useful for treating or	
XX	preventing a respiratory, lung or malignant disease or condition, also	
XX	for enhancing the prophylactic or therapeutic respiratory effect of an	
XX	antiinflammatory steroid in a subject, for reducing or depleting levels	
XX	of, or reducing sensitivity to adenosine, reducing levels of adenosine	
XX	receptor, producing bronchodilation, increasing levels of ubiquinone or	
XX	lung surfactant in a subject's tissue, or treating bronchoconstriction,	
XX	lung inflammation, lung allergies, or a respiratory disease or condition.	
XX	Note: The sequence data for this patent is not represented in the printed	
XX	specification, but was obtained in electronic format directly from WIPO	
XX	at ftp.wipo.int/pub/published_pct_sequences	
XX	Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;	

	Query Match	1.1%	Score 14.8	DB 1	Length 20
	Best Local Similarity	88.9%	Pred. No. 4.4e+02		
	Matches	16	Conservative	0	Mismatches 2; Indels 0; Gaps 0;
QY	1520	AAAAAAAAAAGTAAA	1537		
Dd	1	AAAAAAAAAAAAAAAAAA	18		

RESULT 697  
 ABZ88565  
 ID ABZ88565 strand; DNA; 20 BP.  
 AC ABZ88565;  
 XX  
 DT 17-OCT-2003 (first entry)  
 XX  
 XX Human oligonucleotide sequence.  
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antistatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.  
 XX  
 OS Homo sapiens.  
 PN W0200285308-A2.  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US013135.  
 XX  
 PR 24-APR-2001; 2001US-0286137P.  
 XX  
 PA (EPIC-) EPIGENESIS PHARM INC.  
 XX  
 XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 PI  
 XX WPI, 2003-229219/22.  
 DR  
 XX  
 XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 PS  
 XX  
 PS Disclosure; SEQ ID NO 3807; 872pp; English.  
 CC  
 CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antistatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at [ftp.wipo.int/pub/published\\_pct\\_sequences](http://ftp.wipo.int/pub/published_pct_sequences)  
 CC  
 CC Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
 CC



Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAA 1537  
Db 1 AAAAAAAAAAAAAAAAA 18

## RESULT 698

AB288619  
ID AB288619 standard; DNA; 20 BP.

AC AB288619;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiaesthetic; hypotensive; immunosuppressive; cycostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS WO200285308-A2.

PN 31-OCT-2002.

PD 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

PR (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

DR Pharmaceutical composition for treating ailments associated with impaired

XX respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

XX Disclosure; SEQ ID NO 3861; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiaesthetic, hypotensive,

CC immunosuppressive, and cycostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAA 1537  
Db 1 AAAAAAAAAAAAAAAAA 18

## RESULT 699

AB288266  
ID AB288266 standard; DNA; 20 BP.

AC AB288266;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiaesthetic; hypotensive; immunosuppressive; cycostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS WO200285308-A2.

PN 31-OCT-2002.

PD 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

PR (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

DR Pharmaceutical composition for treating ailments associated with impaired

XX respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

XX Disclosure; SEQ ID NO 3508; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiaesthetic, hypotensive,

CC immunosuppressive, and cycostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 17 A; 1 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
1519 TAAAAAAAAAGTAAA 1536  
|||||||  
3 TAAAAAAAAAAAAAAAA 20

RESULT 700  
ABZ89705  
ID ABZ89705 standard; DNA; 20 BP.  
AC ABZ89705;  
DT 17-OCT-2003 (first entry)  
DE Human oligonucleotide sequence.

Human; antisense; lung dysfunction; nasal airway dysfunction;  
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
antiaschematic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
antisense gene therapy; respiratory; lung; adenosine sensitivity;  
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
lung inflammation; respiratory disease; ds.

Homo sapiens.  
WO200285308-A2.  
31-OCT-2002.  
23-APR-2002; 2002WO-US013135.  
24-APR-2001; 2001US-0286137P.  
(EPIC-) EPIGENESIS PHARM INC.  
NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
Miller S, Tang L, Shahabuddin S;  
WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired  
respiration, has oligo(s) antisense to specific gene(s) or its  
corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
ubiquinone.

Disclosure; SEQ ID NO 4947; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a  
first active agent comprising an oligonucleotide antisense to the  
initiation codon, coding region, 5' or 3' end genomic flanking regions,  
5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
junctions of genes encoding a polypeptide associated with lung and/or  
nasal airway dysfunction and a second active agent comprising an  
antiinflammatory steroid and ubiquinone. A composition of the invention  
has antiinflammatory, antiallergic, antiaschematic, hypotensive,  
immunosuppressive, and cytostatic activity. The composition may have a  
use in antisense gene therapy. The composition is useful for treating or  
preventing a respiratory, lung or malignant disease or condition, also  
for enhancing the prophylactic or therapeutic respiratory effect of an  
antiinflammatory steroid in a subject, for reducing or depleting levels  
of, or reducing sensitivity to adenosine, reducing levels of adenosine  
receptor, producing bronchodilation, increasing levels of ubiquinone or  
lung surfactant in a subject's tissue, or treating bronchoconstriction,  
lung inflammation, lung allergies, or a respiratory disease or condition.  
Note: The sequence data for this patent is not represented in the printed  
specification, but was obtained in electronic format directly from WIPO  
at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
1520 AAAAAAAAAAGTAAA 1537  
|||||||  
1 AAAAAAAAAAAAAAAAA 18

RESULT 701  
ABZ88816  
ID ABZ88816 standard; DNA; 20 BP.  
AC ABZ88816;  
DT 17-OCT-2003 (first entry)  
DE Human oligonucleotide sequence.

Human; antisense; lung dysfunction; nasal airway dysfunction;  
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
antiaschematic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
antisense gene therapy; respiratory; lung; adenosine sensitivity;  
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
lung inflammation; respiratory disease; ds.

Homo sapiens.  
WO200285308-A2.  
31-OCT-2002.  
23-APR-2002; 2002WO-US013135.  
24-APR-2001; 2001US-0286137P.  
(EPIC-) EPIGENESIS PHARM INC.  
NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
Miller S, Tang L, Shahabuddin S;  
WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired  
respiration, has oligo(s) antisense to specific gene(s) or its  
corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
ubiquinone.

Disclosure; SEQ ID NO 4058; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a  
first active agent comprising an oligonucleotide antisense to the  
initiation codon, coding region, 5' or 3' end genomic flanking regions,  
5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
junctions of genes encoding a polypeptide associated with lung and/or  
nasal airway dysfunction and a second active agent comprising an  
antiinflammatory steroid and ubiquinone. A composition of the invention  
has antiinflammatory, antiallergic, antiaschematic, hypotensive,  
immunosuppressive, and cytostatic activity. The composition may have a  
use in antisense gene therapy. The composition is useful for treating or  
preventing a respiratory, lung or malignant disease or condition, also  
for enhancing the prophylactic or therapeutic respiratory effect of an  
antiinflammatory steroid in a subject, for reducing or depleting levels  
of, or reducing sensitivity to adenosine, reducing levels of adenosine  
receptor, producing bronchodilation, increasing levels of ubiquinone or  
lung surfactant in a subject's tissue, or treating bronchoconstriction,  
lung inflammation, lung allergies, or a respiratory disease or condition.  
Note: The sequence data for this patent is not represented in the printed  
specification, but was obtained in electronic format directly from WIPO  
at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred.No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 702

AB288881  
ID AB288881 standard; DNA; 20 BP.

XX AC AB288881;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX KW antiasthmatic; hypotensive; immunosuppressive; cyclostatic; gene therapy;  
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX FN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIC-) EPIGENESIS PHARM INC.

XX PI Nyce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX PS Disclosure; SEQ ID NO 4123; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyclostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred.No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 703

AB289706  
ID AB289706 standard; DNA; 20 BP.

XX AC AB289706;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX KW antiasthmatic; hypotensive; immunosuppressive; cyclostatic; gene therapy;  
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX FN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIC-) EPIGENESIS PHARM INC.

XX PI Nyce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX PS Disclosure; SEQ ID NO 4948; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyclostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

[illegible]

RESULT 704  
 ID AB28620  
 AB28620 standard; DNA; 20 BP.  
 AC  
 XX  
 AB28620;  
 DT 17-OCT-2003 (first entry)  
 DE Human oligonucleotide sequence.  
 XX  
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytoskeletal; gene therapy;  
 KW adenosine gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 PN W0200285308-A2.  
 XX  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US01135.  
 XX  
 PR 24-APR-2001; 2001US-0286137P.  
 XX  
 PA (EPIG-) EPIGENESIS PHARM INC.  
 XX  
 PI NYCE JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,  
 PI Miller S, Tang L, Shahabuddin S;  
 DR WPI; 2003-229219/22.  
 XX  
 PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 PT  
 PS Disclosure; SEQ ID NO 3862; 872bp; English.  
 XX  
 CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytoskeletal activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to, adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergy, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at fcp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

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Query Match      1.1%   Score 14.8 : DB 1 : Length 20;
Best Local Similarity    88.9%   Pred. No. 4.4e+02;
Matches    16; Conservative    0; Mismatches    2; Indels    0; Gaps    0;
```

RESULT 705  
 AB288814  
 ID AB288814 standard; DNA; 20 BP.  
 XX  
 AC  
 XX AB288814;  
 DT 17-OCT-2003 (first entry)  
 XX  
 DE Human oligonucleotide sequence.  
 XX  
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
 XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 XX antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;  
 XX antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 XX lung inflammation; respiratory disease; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200285308-A2.  
 XX  
 PD 31-OCT-2002.  
 XX  
 XX 23-APR-2002; 2002WO-US013135.  
 PF 24-APR-2001; 2001US-0286137P.  
 XX  
 PR (EPIG-) EPIGENESIS PHARM INC.  
 XX  
 PA NYce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 XX Miller S, Tang L, Shahabuddin S;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX  
 DR WPI; 2003-229219/22.  
 XX  
 PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 XX  
 XX Disclosure; SEQ ID NO 4056; 872pp; English.  
 PS  
 XX  
 CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end and genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytosstatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pat\_sequences  
 XX  
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
 XX

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 706

ABZ89241  
ID ABZ89241 standard; DNA; 20 BP.

XX  
AC ABZ89241;

XX  
DT 17-OCT-2003 (first entry)

XX  
DE Human oligonucleotide sequence.

XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;

XX  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX  
KW antiasthmatic; hypotensive; immunosuppressive; cycostatic; gene therapy;

XX  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

XX  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX  
KW lung inflammation; respiratory disease; ds.

XX  
OS Homo sapiens.

XX  
PN WO200285308-A2.

XX  
PD 31-OCT-2002.

XX  
PE 23-APR-2002; 2002WO-US013135.

XX  
PR 24-APR-2001; 2001US-0286137P.

XX  
PA (EPIG-) EPIGENESIS PHARM INC.

XX  
PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;

XX  
PI Miller S, Tang L, Shahabuddin S;

XX  
XX WPI; 2003-229219/22.

XX  
DR WPI; 2003-229219/22.

XX  
PT Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

XX  
PS Disclosure; SEQ ID NO 4483; 872pp; English.

XX  
CC The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cycostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 707

ABZ90650  
ID ABZ90650 standard; DNA; 20 BP.

XX  
AC ABZ90650;

XX  
DT 17-OCT-2003 (first entry)

XX  
DE Human oligonucleotide sequence.

XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;

XX  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX  
KW antiasthmatic; hypotensive; immunosuppressive; cycostatic; gene therapy;

XX  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

XX  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX  
KW lung inflammation; respiratory disease; ds.

XX  
OS Homo sapiens.

XX  
PN WO200285308-A2.

XX  
PD 31-OCT-2002.

XX  
PE 23-APR-2002; 2002WO-US013135.

XX  
PR 24-APR-2001; 2001US-0286137P.

XX  
PA (EPIG-) EPIGENESIS PHARM INC.

XX  
PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;

XX  
PI Miller S, Tang L, Shahabuddin S;

XX  
XX WPI; 2003-229219/22.

XX  
DR WPI; 2003-229219/22.

XX  
PT Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

XX  
PS Disclosure; SEQ ID NO 5892; 872pp; English.

XX  
CC The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cycostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

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Query Match      1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1520 AAAAAAAAAAAGTAAA 1537
      |||||
DB       1 AAAAAAAAAAAAAAAAAA 18
```

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RESULT 708
AB299050/C
ID      AB299050 standard; DNA; 20 BP.
AC      AB299050;
DT      17-OCT-2003 (first entry)
DE      Human PDB4C oligonucleotide sequence.
XX
XX      Human; antisense; lung dysfunction; nasal airway dysfunction;
KW      antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW      antiasthmatic; hypotensive; immunosuppressive; cytosratic; gene therapy;
KW      antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW      adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW      lung inflammation; respiratory disease; ds.
XX
XX      Homo sapiens.
OS
XX      NC0200285308-A2.
PN
XX      31-OCT-2002.
PD
XX      23-APR-2002; 2002MO-US013135.
PF
XX      24-APR-2001; 2001US-0286137P.
PR
XX      (EPIC-) EPIGENESIS PHARM INC.
PA
XX      NINCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI      Miller S, Tang L, Shahabuddin S;
PT      WPI; 2003-229219/22.
DR
XX      Pharmaceutical composition for treating ailments associated with impaired
PT      respiration, has oligo(s) antisense to specific gene(s) or its
PT      corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT      ubiquinone.
XX
XX      Disclosure; SEQ ID NO 14292; 872pp; English.
PS
XX      The invention relates to a novel pharmaceutical composition, which has a
CC      first active agent comprising an oligonucleotide antisense to the
CC      initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC      5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC      junctions of genes encoding a polypeptide associated with lung and/or
CC      nasal airway dysfunction and a second active agent comprising an
CC      antiinflammatory steroid and ubiquinone. A composition of the invention
CC      has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC      immunosuppressive, and cytosratic activity. The composition may have a
CC      use in antisense gene therapy. The composition is useful for treating or
CC      preventing a respiratory, lung or malignant disease or condition, also
CC      for enhancing the prophylactic or therapeutic respiratory effect of an
CC      antiinflammatory steroid in a subject, for reducing or depleting levels
CC      of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC      receptor, producing bronchodilation, increasing levels of ubiquinone or
CC      lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC      lung inflammation, lung allergies, or a respiratory disease or condition.
CC      Note: The sequence data for this patent is not represented in the printed
CC      specification, but was obtained in electronic format directly from WIPO
CC      at ftp.wipo.int/pub/published_pct_sequences
XX
XX      Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
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Query Match      1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1520 AAAAAAAAAAAGTAAA 1537
      |||||
DB       19 AAAAAAAAAAAAAAAAAA 2
```

```
RESULT 709
AB288618
ID      AB288618 standard; DNA; 20 BP.
AC      AB288618;
DT      17-OCT-2003 (first entry)
DE      Human oligonucleotide sequence.
XX
XX      Human; antisense; lung dysfunction; nasal airway dysfunction;
KW      antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW      antiasthmatic; hypotensive; immunosuppressive; cytosratic; gene therapy;
KW      antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW      adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW      lung inflammation; respiratory disease; ds.
XX
XX      Homo sapiens.
OS
XX      NC0200285308-A2.
PN
XX      31-OCT-2002.
PD
XX      23-APR-2002; 2002MO-US013135.
PF
XX      24-APR-2001; 2001US-0286137P.
PR
XX      (EPIC-) EPIGENESIS PHARM INC.
PA
XX      NINCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI      Miller S, Tang L, Shahabuddin S;
PT      WPI; 2003-229219/22.
DR
XX      Pharmaceutical composition for treating ailments associated with impaired
PT      respiration, has oligo(s) antisense to specific gene(s) or its
PT      corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT      ubiquinone.
XX
XX      Disclosure; SEQ ID NO 3860; 872pp; English.
PS
XX      The invention relates to a novel pharmaceutical composition, which has a
CC      first active agent comprising an oligonucleotide antisense to the
CC      initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC      5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC      junctions of genes encoding a polypeptide associated with lung and/or
CC      nasal airway dysfunction and a second active agent comprising an
CC      antiinflammatory steroid and ubiquinone. A composition of the invention
CC      has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC      immunosuppressive, and cytosratic activity. The composition may have a
CC      use in antisense gene therapy. The composition is useful for treating or
CC      preventing a respiratory, lung or malignant disease or condition, also
CC      for enhancing the prophylactic or therapeutic respiratory effect of an
CC      antiinflammatory steroid in a subject, for reducing or depleting levels
CC      of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC      receptor, producing bronchodilation, increasing levels of ubiquinone or
CC      lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC      lung inflammation, lung allergies, or a respiratory disease or condition.
CC      Note: The sequence data for this patent is not represented in the printed
CC      specification, but was obtained in electronic format directly from WIPO
CC      at ftp.wipo.int/pub/published_pct_sequences
XX
XX      Sequence 20 BP; 19 A; 1 C; 0 G; 0 T; 0 U; 0 Other;
```

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAAA 1537  
Db 2 AAAAAAAAAAAAAAAAAA 19

## RESULT 710

ABZ88815  
ID ABZ88815 standard; DNA; 20 BP.

AC ABZ88815;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KM antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KM antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KM antisense gene therapy; respiratory; lung; adenosine sensitivity;

KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

PF 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

PS Disclosure; SEQ ID NO 4057; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 711

ABZ86620  
ID ABZ86620 standard; DNA; 20 BP.

AC ABZ86620;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KM antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KM antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KM antisense gene therapy; respiratory; lung; adenosine sensitivity;

KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

PF 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

PS Claim 15; SEQ ID NO 1862; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 1 A; 4 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
486 GGCTGGGGGGGAGCGTG 503  
2 GGCTGCTGGCGGAGCGTG 19

RESULT 712  
AB285311/c  
ID AB285311 standard; DNA; 20 BP.  
AC AB285311;  
DT 17-OCT-2003 (first entry)  
DE Human oligonucleotide sequence.

Human; antiseize; lung dysfunction; nasal airway dysfunction;  
antiflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
antiaesthetic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
antiseize gene therapy; respiratory; lung; adenosine sensitivity;  
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIC-) EPIGENESIS PHARM INC.

NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired  
respiration, has oligo(s) antiseize to specific gene(s) or its  
corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
ubiquinone.

Claim 15; SEQ ID NO 553; 872bp; English.

The invention relates to a novel pharmaceutical composition, which has a  
first active agent comprising an oligonucleotide antiseize to the  
initiation codon, coding region, 5' or 3' and genomic flanking regions,  
5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
junctions of genes encoding a polypeptide associated with lung and/or  
nasal airway dysfunction and a second active agent comprising an  
antiflammatory steroid and ubiquinone. A composition of the invention  
has antiinflammatory, antiallergic, antiaesthetic, hypotensive,  
immunosuppressive, and cyostatic activity. The composition may have a  
use in antiseize gene therapy. The composition is useful for treating or  
preventing a respiratory, lung or malignant disease or condition, also  
for enhancing the prophylactic or therapeutic respiratory effect of an  
antiflammatory steroid in a subject, for reducing or depleting levels  
of, or reducing sensitivity to adenosine, reducing levels of adenosine  
receptor, producing bronchodilation, increasing levels of ubiquinone or  
lung surfactant in a subject's tissue, or treating bronchoconstriction,  
lung inflammation, lung allergies, or a respiratory disease or condition.  
Note: The sequence data for this patent is not represented in the printed  
specification, but was obtained in electronic format directly from WIPO  
at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
1520 AAAAAAAAAAAGTAAAA 1537  
20 AAAAAAAAAAAAAAAAAAAAA 3

RESULT 713  
AB285435/c  
ID AB285435 standard; DNA; 20 BP.  
AC AB285435;  
DT 17-OCT-2003 (first entry)  
DE Human oligonucleotide sequence.

Human; antiseize; lung dysfunction; nasal airway dysfunction;  
antiflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
antiaesthetic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
antiseize gene therapy; respiratory; lung; adenosine sensitivity;  
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIC-) EPIGENESIS PHARM INC.

NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired  
respiration, has oligo(s) antiseize to specific gene(s) or its  
corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
ubiquinone.

Claim 15; SEQ ID NO 677; 872bp; English.

The invention relates to a novel pharmaceutical composition, which has a  
first active agent comprising an oligonucleotide antiseize to the  
initiation codon, coding region, 5' or 3' and genomic flanking regions,  
5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
junctions of genes encoding a polypeptide associated with lung and/or  
nasal airway dysfunction and a second active agent comprising an  
antiflammatory steroid and ubiquinone. A composition of the invention  
has antiinflammatory, antiallergic, antiaesthetic, hypotensive,  
immunosuppressive, and cyostatic activity. The composition may have a  
use in antiseize gene therapy. The composition is useful for treating or  
preventing a respiratory, lung or malignant disease or condition, also  
for enhancing the prophylactic or therapeutic respiratory effect of an  
antiflammatory steroid in a subject, for reducing or depleting levels  
of, or reducing sensitivity to adenosine, reducing levels of adenosine  
receptor, producing bronchodilation, increasing levels of ubiquinone or  
lung surfactant in a subject's tissue, or treating bronchoconstriction,  
lung inflammation, lung allergies, or a respiratory disease or condition.  
Note: The sequence data for this patent is not represented in the printed  
specification, but was obtained in electronic format directly from WIPO  
at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;





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Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 716
ABZ89302
ID ABZ89302 standard; DNA; 20 BP.
XX
XX AC ABZ89302;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiaschematic; hypotensive; immunosuppressive; cyostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
XX PA (EPIC-) EPIGENESIS PHARM INC.
XX
XX PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX PT Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX PS Disclosure; SEQ ID NO 4544; 872pp; English.
XX
XX CC The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiaschematic, hypotensive,
XX immunosuppressive, and cyostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or creating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
```

```
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 717
ABZ87681/c
ID ABZ87681 standard; DNA; 20 BP.
XX
XX AC ABZ87681;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiaschematic; hypotensive; immunosuppressive; cyostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
XX PA (EPIC-) EPIGENESIS PHARM INC.
XX
XX PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX PT Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX PS Disclosure; SEQ ID NO 2923; 872pp; English.
XX
XX CC The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiaschematic, hypotensive,
XX immunosuppressive, and cyostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or creating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
```

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537  
DB 19 AAAAAAAAAAAAAAAAAA 2

## RESULT 718

ABZ88566  
ID ABZ88566 standard; DNA; 20 BP.

AC ABZ88566;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KM antiasthmatic; hypotensive; immunosuppressive; cyclostatic; gene therapy;  
KM antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS WO200285308-A2.

PN 31-OCT-2002.

PD 23-APR-2002; 2002WO-US013135.

PE 24-APR-2001; 2001US-0286137P.

PR (EPIG-) EPIGENESIS PHARM INC.

PA (NYE JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

PS Disclosure; SEQ ID NO 3808; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyclostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 719

ABZ89086  
ID ABZ89086 standard; DNA; 20 BP.

AC ABZ89086;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KM antiasthmatic; hypotensive; immunosuppressive; cyclostatic; gene therapy;  
KM antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS WO200285308-A2.

PN 31-OCT-2002.

PD 23-APR-2002; 2002WO-US013135.

PE 24-APR-2001; 2001US-0286137P.

PR (EPIG-) EPIGENESIS PHARM INC.

PA (NYE JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

PS Disclosure; SEQ ID NO 4328; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyclostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAA 1537  
| | | | | | | | | | | | | | | | | | | | | |  
DB 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 720

ABZ89085  
ID ABZ89085 standard; DNA; 20 BP.

XX AC ABZ89085;

DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiaesthetic; hypotensive; immunosuppressive; cyostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahbuddin S;

XX PT WPI; 2003-229219/22.

XX PS Disclosure; SEQ ID NO 4327; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiaesthetic, hypotensive,

CC immunosuppressive, and cyostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX CC Sequence 20 BP; 19 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAA 1537  
| | | | | | | | | | | | | | | | | | | | | |  
DB 3 AAAAAAAAAAAAAAAAAA 20

## RESULT 721

ABZ92864  
ID ABZ92864 standard; DNA; 20 BP.

XX AC ABZ92864;

DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiaesthetic; hypotensive; immunosuppressive; cyostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahbuddin S;

XX PT WPI; 2003-229219/22.

XX PS Disclosure; SEQ ID NO 8106; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiaesthetic, hypotensive,

CC immunosuppressive, and cyostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX CC Sequence 20 BP; 12 A; 1 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1512 TGTAAATTAAAAAAA 1529  
|||  
Db 3 TGTCAAGTAAAAAAA 20

## RESULT 722

ABZ85533  
ID ABZ85533 standard; DNA; 20 BP.

AC ABZ85533;

DT 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cyclostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandraseagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

PS Claim 15; SEQ ID NO 775; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cyclostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

CC Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAAGTAAA 1537  
|||  
Db 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 723

ABZ85595  
ID ABZ85595 standard; DNA; 20 BP.

AC ABZ85595;

DT 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cyclostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandraseagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

PS Claim 15; SEQ ID NO 837; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cyclostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

CC Sequence 20 BP; 0 A; 5 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 723 TTTTGGCTGCTGCTGCTGC 740  
DB 1 TTGTGCTGCTGCTGCTGC 18

## RESULT 724

ABZ89015  
ID ABZ89015 standard; DNA; 20 BP.

XX AC ABZ89015;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisease; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiaesthetic; hypotensive; immunosuppressive; cytosstatic; gene therapy;  
KW antisease gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisease to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

PS Disclosure; SEQ ID NO 4257; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisease to the  
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,  
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
XX junctions of genes encoding a polypeptide associated with lung and/or  
XX nasal airway dysfunction and a second active agent comprising an  
XX antiinflammatory steroid and ubiquinone. A composition of the invention  
XX has antiinflammatory, antiallergic, antiaesthetic, hypotensive,  
XX immunosuppressive, and cytosstatic activity. The composition may have a  
XX use in antisease gene therapy. The composition is useful for treating or  
XX preventing a respiratory, lung or malignant disease or condition, also  
XX for enhancing the prophylactic or therapeutic respiratory effect of an  
XX antiinflammatory steroid in a subject, for reducing or depleting levels  
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine  
XX receptor, producing bronchodilation, increasing levels of ubiquinone or  
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,  
XX lung inflammation, lung allergies, or a respiratory disease or condition.  
XX Note: The sequence data for this patent is not represented in the printed  
XX specification, but was obtained in electronic format directly from WIPO  
XX at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAAGTAAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAAAAA 18

## RESULT 725

ABZ89441  
ID ABZ89441 standard; DNA; 20 BP.

XX AC ABZ89441;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisease; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiaesthetic; hypotensive; immunosuppressive; cytosstatic; gene therapy;  
KW antisease gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisease to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

PS Disclosure; SEQ ID NO 4683; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisease to the  
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,  
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
XX junctions of genes encoding a polypeptide associated with lung and/or  
XX nasal airway dysfunction and a second active agent comprising an  
XX antiinflammatory steroid and ubiquinone. A composition of the invention  
XX has antiinflammatory, antiallergic, antiaesthetic, hypotensive,  
XX immunosuppressive, and cytosstatic activity. The composition may have a  
XX use in antisease gene therapy. The composition is useful for treating or  
XX preventing a respiratory, lung or malignant disease or condition, also  
XX for enhancing the prophylactic or therapeutic respiratory effect of an  
XX antiinflammatory steroid in a subject, for reducing or depleting levels  
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine  
XX receptor, producing bronchodilation, increasing levels of ubiquinone or  
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,  
XX lung inflammation, lung allergies, or a respiratory disease or condition.  
XX Note: The sequence data for this patent is not represented in the printed  
XX specification, but was obtained in electronic format directly from WIPO  
XX at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAAA 1537  
|||||  
Db 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 726

ABZ85535  
ID ABZ85535 standard; DNA; 20 BP.

AC ABZ85535;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KM antiaesthetic; hypotensive; immunosuppressive; cyclostatic; gene therapy;  
KM antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KM lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

PD 31-OCT-2002.

PF 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI NYce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

PS Claim 15; SEQ ID NO 777; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiaesthetic, hypotensive,  
CC immunosuppressive, and cyclostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAAA 1537  
|||||  
Db 2 AAAAAAAAAAAGAAAAA 19

## RESULT 727

ABZ88445  
ID ABZ88445 standard; DNA; 20 BP.

AC ABZ88445;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KM antiaesthetic; hypotensive; immunosuppressive; cyclostatic; gene therapy;  
KM antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KM lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

PD 31-OCT-2002.

PF 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI NYce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

PS Disclosure; SEQ ID NO 3687; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiaesthetic, hypotensive,  
CC immunosuppressive, and cyclostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 1 A; 3 C; 6 G; 10 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4,4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 716 TTCTCTGTTTGGCTGTG 733  
| | | | | | | | | | | | | | | | | | | | | |  
Db 2 TTCTCTGTTTGGCTGTG 19

## RESULT 728

ABZ89016  
ID ABZ89016 standard; DNA; 20 BP.  
XX  
XX AC ABZ89016;  
XX  
XX 17-OCT-2003 (first entry)  
DT  
DE Human oligonucleotide sequence.

XX Human; antisease; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
XX antisease gene therapy; respiratory; lung; adenosine sensitivity;  
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

PT WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisease to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX Disclosure; SEQ ID NO 4258; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisease to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyostatic activity. The composition may have a  
CC use in antisease gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4,4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAA 1537  
| | | | | | | | | | | | | | | | | | | | | |  
Db 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 729

ABZ89120  
ID ABZ89120 standard; DNA; 20 BP.  
XX  
XX AC ABZ89120;  
XX  
XX 17-OCT-2003 (first entry)  
DT  
DE Human oligonucleotide sequence.

XX Human; antisease; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
XX antisease gene therapy; respiratory; lung; adenosine sensitivity;  
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

PT WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisease to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX Disclosure; SEQ ID NO 4362; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisease to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyostatic activity. The composition may have a  
CC use in antisease gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;



Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537  
 |||||  
 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 730

AB289704  
 ID AB289704 standard; DNA; 20 BP.

XX AC AB289704;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiaesthetic; hypotensive; immunosuppressive; cyclostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX FN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIC-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasegna A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX PT WPI; 2003-229219/22.

XX PS Disclosure; SEQ ID NO 4946; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiaesthetic, hypotensive,

CC immunosuppressive, and cyclostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAAGTAAA 1537  
 |||||  
 1 AAAAAAAAAAAAAAAAAA 18

## RESULT 731

ACD27320  
 ID ACD27320 standard; DNA; 20 BP.

XX AC ACD27320;

XX DT 15-OCT-2003 (first entry)

XX DE Nanotechnology nucleic acid detection method associated #54.

XX KW Nanotechnology; ss; nucleic acid detection; nanoparticle;

KW virus detection; human immunodeficiency virus; HIV; hepatitis; herpes;

KW cytomegalovirus; Epstein-Barr virus; bacterial disease; DNA sequencing;

KW sexually transmitted disease; inherited disorder; forensic;

KW paternity testing; cell line authentication.

XX OS Synthetic.

XX FN Key

XX PD modified\_base

XX FT 1

XX FT /\*tag= a

XX FT /mod\_base= OTHER

XX FT /note= "OTHER= Thiol modified" "

XX PN US2002155461-A1.

XX PD 24-OCT-2002.

XX PF 12-OCT-2001; 2001US-00976378.

XX PR 29-JUL-1996; 96US-0031809P.

XX PR 21-JUL-1997; 97WO-US012783.

XX PR 29-JAN-1999; 99US-00240755.

XX PR 25-JUN-1999; 99US-00344667.

XX PR 26-APR-2000; 2000US-0200161P.

XX PR 26-JUN-2000; 2000US-00603830.

XX PA (NANO-) NANOSPHERE INC.

XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;

XX PI Taton TA;

XX PT WPI; 2003-228115/22.

XX PS Example 18; Page 44; 130pp; English.

XX CC This invention relates to a novel method for detecting a nucleic acid

CC having 2 portions. The method comprises providing nanoparticles having

CC oligonucleotides attached, where the oligonucleotide on each nanoparticle

CC has a sequence complementary to a sequence of 2 portions of nucleic acid,

CC the nucleic acid and nanoparticle are contacted to allow hybridisation of

CC the oligonucleotide on the nanoparticle with two or more portions of

CC nucleic acid and observing a detectable change brought about by the

CC hybridisation. The method of the invention is useful for separating a

CC selected nucleic acid having 2 portions, from other nucleic acids, and

CC for detecting nucleic acids having 2 portions. The method of the

CC invention is useful for detecting any type of nucleic acids which may be

CC used for diagnosis of disease and in sequencing of nucleic acids.

CC Preferably, the method is useful for detecting nucleic acids for

CC diagnosis and/or monitoring of viral diseases (human immunodeficiency

CC virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr  
CC virus), bacterial diseases, sexually transmitted diseases, inherited  
CC disorders, in forensics, in DNA sequencing, for paternity testing, for  
CC cell line authentication, for monitoring gene therapy, etc. This method  
CC involves detecting nucleic acids based on observing a colour change with  
CC the naked eye so is cheap, fast, simple and robust, and does not require  
CC specialised expensive equipment. The present sequence represents a thiol  
CC modified oligonucleotide sequence used to demonstrate the method of the  
CC invention

XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 4.4e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1520 AAAAAAAAAAGTAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 732

ACC58867/c  
ID ACC58867 standard; DNA; 20 BP.

XX ACC58867;

DT 08-SEP-2003 (first entry)

XX Doubly labelled DNA probe.

XX Probe; nucleic acid detection; ss.

XX Synthetic.

XX WO2003043402-A2.

XX 30-MAY-2003.

XX 21-OCT-2002; 2002WO-US033699.

XX 19-OCT-2001; 2001US-0336432P.

XX (PROL-) PROLIGO LLC.

XX Bruce I, Davies M, Wolter A;

XX WPI; 2003-505122/47.

XX  
XX  
XX The present sequence is an example of nucleic acid probes of the  
XX invention. The probe may be doubly labelled with non-identical covalently  
XX attached dyes, e.g. the fluorescent intercalator ethidium, which serves  
XX as the detector dye and the fluorescent dye fluorescein, which serves as  
XX the donor dye of a fluorescent resonance energy transfer (FRET) system. A  
XX bifunctional linker was used to attach the dyes to the oligonucleotide.  
XX The probe generates a fluorescent signal upon hybridisation to a  
XX complementary nucleic acid based on the interaction of the intercalator  
XX with the formed double-stranded DNA. Nucleic acid probes of the invention  
XX can be used in homogeneous assays, real-time PCR monitoring,  
XX transcription assays, expression analysis on nucleic acid microarrays and  
XX other microarray applications such as genotyping

XX  
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 4.4e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1520 AAAAAAAAAAGTAAA 1537  
Db 20 AAAAAAAAAAAAAAAAAA 3

RESULT 733

AB222916/c  
ID AB222916 standard; DNA; 20 BP.

XX AB222916;

DT 08-APR-2003 (first entry)

XX Phosphorothioate 20-mer oligonucleotide #1.

XX Chiral; phosphorothioate; oligonucleotide synthesis; enantiomer; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note="phosphorothioate linkages"

XX WO2002102815-A2.

XX 27-DEC-2002.

XX 13-JUN-2002; 2002WO-US018581.

XX 14-JUN-2001; 2001US-00881535.

XX (ISIS-) ISIS PHARM INC.

XX Ravikumar VT;

XX WPI; 2003-157021/15.

XX  
XX  
XX Preparing internucleotide phosphorothioate linkage enhanced in Sp/Rp

XX enantiomer, by coupling a synthon with 2'-substituted nucleoside in

XX presence of coupling agent having a pKa that enhances linkage in Sp/Rp

XX enantiomer.

XX Example 1; Page 31; 65pp; English.

XX  
XX  
XX The present invention describes a method (M1) for preparing an

XX internucleotide phosphorothioate linkage enriched in the Sp or Rp

XX enantiomer between a synthon having a hydroxyl moiety at the 5' position

XX and a 2'-substituted nucleoside having an activated phosphate moiety at

XX the 3'-position, comprising coupling a synthon with a 2'-substituted

XX nucleoside in the presence of coupling agent that is selected to enhance

XX either the Rp or Sp enantiomer according to its pKa. This method is

XX useful for preparing an oligonucleotide having at least one region of

XX internucleotide linkages that is enhanced in the Sp or Rp enantiomer,

XX which involves providing a nucleoside having a hydroxyl moiety at the 5'-

XX position or a growing oligonucleotide chain having a hydroxyl moiety at

XX the 5'-position, coupling the nucleoside or growing oligonucleotide chain

XX to a 2'-substituted nucleoside having an activated phosphate moiety at

XX the 3' position in the presence of the coupling agent, and repeating the

XX coupling step until the desired number of linkages is established. The

XX oligonucleotide having a region of internucleotide linkages that is

XX enhanced in the Sp enantiomer is further processed to include another

XX region of internucleotide linkages that is enhanced in the Sp and/or Rp

XX enantiomer. Oligonucleotides prepared by the method lead to improved

XX drugs, diagnostics and research reagents. The present sequence represents

XX an oligonucleotide used in the exemplification of the present invention

XX  
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 4.4e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
DB 20 AAAAAAAAAAAAAAAAAA 3

RESULT 734  
ABD24497  
ID ABD24497 standard; DNA; 20 BP.  
XX  
AC ABD24497;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE A1652901-derived oligonucleotide SEQ ID 3509.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
OS  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PE 23-APR-2002; 2002MO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EP1G-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 3509; 763pp; English.

CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1520 AAAAAAAAAAGTAAA 1537  
DB 1 AAAAAAAAAAAAAAAAAA 18

RESULT 735  
ABD25047  
ID ABD25047 standard; DNA; 20 BP.  
XX  
AC ABD25047;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE A1128305-derived oligonucleotide SEQ ID 4059.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
OS  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PE 23-APR-2002; 2002MO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EP1G-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 4059; 763pp; English.

```
CC of the invention has anti-allergic, anti-inflammatory, anti-asthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 1 AAAAAAAAAAAAAAAAAA 18
XX
RESULT 736
ABD25315
ID ABD25315 standard; DNA; 20 BP.
XX
AC ABD25315;
XX
DT 29-JUL-2004 (first entry)
XX
DE A1092429-derived oligonucleotide SEQ ID 4327.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; anti-asthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hyperextension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIC-) EPIGENESIS PHARM INC.
XX
PI NYCE JW, LI Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093056/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung artery or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15, SEQ ID NO 4327; 763bp; English.
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XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung artery or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, anti-asthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 19 A; 0 C; 1 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1520 AAAAAAAAAAGTAAAA 1537
Db 3 AAAAAAAAAAAAAAAAAA 20
XX
RESULT 737
ABD25316
ID ABD25316 standard; DNA; 20 BP.
XX
AC ABD25316;
XX
DT 29-JUL-2004 (first entry)
XX
DE A1092429-derived oligonucleotide SEQ ID 4328.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; anti-asthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hyperextension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIC-) EPIGENESIS PHARM INC.
```

XX Myce JM<sup>1</sup>, Li Y<sup>2</sup>, Sandrasegura A<sup>3</sup>, Katz E<sup>4</sup>, Pabalan J<sup>5</sup>, Aguilar D<sup>6</sup>  
P1 Miller S<sup>7</sup>, Tang L<sup>8</sup>, Shahabuddin S<sup>9</sup>  
XX  
DR WPI, 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisenese  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 4328; 763pp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (b) or (b) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antisthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4,4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0  
  
Oy 1520 AAAAAAAAAAGTAAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18  
||| | |||  
|||||  
RESULT 738  
ABD21763  
ID ABD21763 standard; DNA; 20 BP.  
XX  
XX ABD21763;  
DT 29-JUL-2004 (first entry)  
XX  
DE Human etamlocalin-derived oligo SEQ ID 775.  
XX  
XX Human, antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KM respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KM surfactant depletion; anti-allergic; anti-inflammatory; antasthmatic;  
KM analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KM respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KM pulmonary transplantation rejection; ss; primer.

OS	Homo sapiens.
XX	
PN	WO200285309-A2.
XX	
PD	31-OCT-2002.
XX	
PF	23-APR-2002; 2002WO-US013143.
XX	
PR	24-APR-2001; 2001US-0286036P.
XX	
PA	(EPIC-) EPIGENESIS PHARM INC.
PI	Nyee JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI	Miller S, Tang L, Shahabuddin S,
XX	
DR	WPI, 2003-093058/08.
XX	
PT	Pharmaceutical composition for treating asthma, has antienase
PT	oligonucleotide containing less percentage of adenosine, targeted to
PT	nucleic acids associated with lung airway or lung dysfunction, and
PT	bronchodilating agent.
XX	
PS	Claim 15; SEQ ID NO 775; 763pp; English.
XX	
CC	This invention describes a novel composition (a) a first active agent,
CC	comprising oligonucleotides, effective for alleviating
CC	bronchoconstriction, respiratory tract inflammation, allergies and
CC	reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC	surfactant depletion or hyposecretion, when administered to a mammal. The
CC	oligonucleotides are derived from a gene encoding or regulating
CC	expression of a target polypeptide associated with lung airway or lung
CC	dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC	The invention also describes a kit, that comprises: (a) a delivery
CC	device, in separate containers; (b) the oligonucleotides; (c)
CC	instructions for adding a carrier and for use of the kit. The composition
CC	of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC	analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC	beta-adrenergic agonist. The composition is useful for preventing or
CC	treating a respiratory, lung or malignant disease. The administered
CC	composition comprises oligo and is administered to reduce the production
CC	or availability, or to increase the degradation of the target mRNA or to
CC	reduce the amount of target polypeptide present in the lungs. The
CC	pulmonary obstruction, and/or bronchoconstriction and/or lung
CC	inflammation, allergies and/or surfactant hypoproduction are associated
CC	with a disease or condition such as pulmonary vasoconstriction,
CC	inflammation, allergies, asthma, impeded respiration, respiratory
CC	dilettens syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC	hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC	transplantation rejection, pulmonary infections, bronchitis or cancer.
CC	The reduced adenosine content of the anti-sense oligos corresponding to
CC	thymidines present in the target RNA serves to prevent the breakdown of
CC	the oligonucleotides into products that free adenosine into the system
CC	e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC	prevent any unwanted effects due to it
XX	
SQ	Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX	
Query Match	1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity	88.9%; Prid. No. 4.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
QY	1520 AAAAAAAAAAGTAAAA 1537
DB	1 AAAAAAAAAAAAAAAAAAAAA 18
XX	
RESULT 739	
ID	ABD25246
XX	ABD25246 standard; DNA; 20 BP.
AC	ABD25246;
XX	

DT 29-JUL-2004 (first entry)  
XX  
DE A1051839-derived oligonucleotide SEQ ID 4258.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytosolic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,  
PI Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 4258; 763pp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, of the anti-sense oligos corresponding to  
CC the reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidine present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
Query March 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred.No.4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18  
RESULT 740  
ABD24848  
ID ABD24848 standard; DNA; 20 BP.  
XX  
AC ABD24848;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE A1092623-derived oligonucleotide SEQ ID 3860.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytosolic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 3860; 763pp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary

CC transplacental rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidine present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
CC  
SQ Sequence 20 BP; 19 A; 1 C; 0 G; 0 T; 0 U; 0 Other;  
  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Oy 1520 AAAAAAAAAAGTAAAA 1537  
Db 2 AAAAAAAAAAAAAAAAAA 19  
  
RESULT 741  
ABD24849  
ID ABD24849 standard; DNA; 20 BP.  
XX  
AC ABD24849;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE A1092623-derived oligonucleotide SEQ ID 3861.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 3861; 763pp; English.

CC analgesic, hypotensive, immunosuppressive and cyostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplacental rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidine present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
CC  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Oy 1520 AAAAAAAAAAGTAAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18  
  
RESULT 742  
ABD21665/C  
ID ABD21665 standard; DNA; 20 BP.  
XX  
AC ABD21665;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE Human etanicoalcin-derived oligo SEQ ID 677.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 677; 763pp; English.

CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

QY Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Db 1520 AAAAAAAAAAAGTAAA 1537  
20 AAAAAAAAAAAAAAAAAA 3

RESULT 743  
ABD24796  
ID ABD24796 standard; DNA; 20 BP.

XX ABD24796;

DT 29-JUL-2004 (first entry)

XX A112689-derived oligonucleotide SEQ ID 3808.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hyperinflation;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

OS W0200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIC-) EPIGENESIS PHARM INC.

PI Nyce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;  
XX WPI; 2003-093058/08.  
DR  
XX  
PT pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.

PS Claim 15; SEQ ID NO 3808; 763bp; English.

XX This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

QY Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Db 1520 AAAAAAAAAAAGTAAA 1537  
1 AAAAAAAAAAAAAAAAAA 18

RESULT 744  
ABD25045  
ID ABD25045 standard; DNA; 20 BP.

XX ABD25045;

DT 29-JUL-2004 (first entry)

XX A1128305-derived oligonucleotide SEQ ID 4057.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hyperinflation;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.



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OS Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasegura A, Katz B, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahbuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4057; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4.4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1520 AAAAAAAAAAGTAAA 1537
XX
XX 1 AAAAAAAAAAAAAAAAAA 18
XX
XX RESULT 745
XX ABD25350
XX ID ABD25350 standard; DNA; 20 BP.
XX AC ABD25350;
XX XX
XX 29-JUL-2004 (first entry)
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```
XX
XX A1096522-derived oligonucleotide SEQ ID 4362.
XX
XX DE Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX KW pulmonary transplantation rejection; ss; primer.
XX
XX OS Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasegura A, Katz B, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahbuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4362; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 4.4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

QY 1520 AAAAAAAAAAGTAAA 1537  
 |||||  
 Db 1 AAAAAAAAAAAAAAAA 18

RESULT 746  
 ABD25245  
 ID ABD25245 standard; DNA; 20 BP.  
 XX  
 AC ABD25245;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE A1051839-derived oligonucleotide SEQ ID 4257.  
 XX  
 KW Human; antisease; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenostine sensitivity; lung; cancer;  
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 KM  
 XX Homo sapiens.  
 OS  
 XX WO200285309-A2.  
 PN  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US013143.  
 XX  
 PR 24-APR-2001; 2001US-0286036P.  
 XX  
 PA (EPIG-) EPIGENESIS PHARM INC.  
 XX  
 PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX  
 DR WPI; 2003-093058/08.  
 XX  
 PT Pharmaceutical composition for treating asthma, has antisease  
 PT oligonucleotide containing less percentage of adenostine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX  
 PS Claim 15; SEQ ID NO 4257; 763pp; English.  
 XX  
 CC This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenostine sensitivity, levels of adenostine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenostine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenostine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 XX  
 SQ Sequence 20 BP, 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
 XX

Query Match 1.1%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1520 AAAAAAAAAAGTAAA 1537  
 |||||  
 Db 1 AAAAAAAAAAAAAAAA 18

RESULT 747  
 ABD25169  
 ID ABD25169 standard; DNA; 20 BP.  
 XX  
 AC ABD25169;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE A1041482-derived oligonucleotide SEQ ID 4181.  
 XX  
 KW Human; antisease; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenostine sensitivity; lung; cancer;  
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 KM  
 XX Homo sapiens.  
 OS  
 XX WO200285309-A2.  
 PN  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US013143.  
 XX  
 PR 24-APR-2001; 2001US-0286036P.  
 XX  
 PA (EPIG-) EPIGENESIS PHARM INC.  
 XX  
 PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX  
 DR WPI; 2003-093058/08.  
 XX  
 PT Pharmaceutical composition for treating asthma, has antisease  
 PT oligonucleotide containing less percentage of adenostine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX  
 PS Claim 15; SEQ ID NO 4181; 763pp; English.  
 XX  
 CC This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenostine sensitivity, levels of adenostine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC	beta-adrenergic agonist. The composition is useful for preventing or
CC	treating a respiratory, lung or malignant disease. The administered
CC	composition comprises oligo and is administered to reduce the production
CC	or availability, or to increase the degradation of the target mRNA or to
CC	reduce the amount of target polypeptide present in the lungs. The
CC	pulmonary obstruction, and/or bronchoconstriction and/or lung
CC	inflammation, allergies and/or surfactant hypoproduction are associated
CC	with a disease or condition such as pulmonary vasoconstriction,
CC	inflammation, allergies, asthma, impeded respiration, respiratory
CC	distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC	hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC	transplantation rejection, pulmonary infections, bronchitis or cancer.
CC	The reduced adenosine content of the anti-sense oligos corresponding to
CC	thymidines present in the target RNA serves to prevent the breakdown of
CC	the oligonucleotides into products that free adenosine into the system
CC	e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to
CC	prevent any unwanted effects due to it
XX	
SO	Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Qy	Query Match 1.1%; Score 14.8; DB 1; Length 20;
Db	Best Local Similarity 88.9%; Pred. No. 4.4e+02;
	Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0
Oy	1520 AAAAAAAAAAAGTAAA 1537
Db	1 AAAAAAAAAAAAAAAAAA 18
RESULT 748	
ABD25471	
ID	ABD25471 standard; DNA; 20 BP.
XX	
AC	ABD25471;
XX	
DT	29-JUL-2004 (first entry)
XX	
DE	A1041212-derived oligonucleotide SEQ ID 4483.
XX	
KW	Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW	respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW	surfactant depletion; antiallergic; antiinflammatory; antiaslatic;
KW	analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW	beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW	respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW	emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW	pulmonary transplantation rejection; ss; primer.
XX	
OS	Homo sapiens.
XX	
PN	WO200285309-A2.
XX	
PD	31-OCT-2002.
XX	
PF	23-APR-2002; 2002WO-US013143.
XX	
PR	24-APR-2001; 2001US-0286036P.
XX	
PA	(EPRG-) EPIGENESIS PHARM INC.
PI	Nyce JM, Li Y, Sandraaagra A, Katz E, Pabalan J, Aguilar D,
PI	Miller S, Tang L, Shahbuddin S,
XX	
DR	WPI; 2003-093058/08.
XX	
PT	Pharmaceutical composition for treating asthma, has antisense
PT	oligonucleotide containing less percentage of adenosine, targeted to
PT	nucleic acids associated with lung airway or lung dysfunction, and
PT	bronchodilating agent.
XX	
S8	Claim 15; SEQ ID NO 4483; 763bp; English.
CC	This invention describes a novel composition (a) a first active agent,

CC	comprising oligonucleotides, effective for alleviating
CC	bronchoconstriction, respiratory tract inflammation, allergies and
CC	reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC	surfactant depletion or hyposecretion, when administered to a mammal. The
CC	oligonucleotides are derived from a gene encoding or regulating
CC	expression of a target polypeptide associated with lung airway or lung
CC	dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC	The invention also describes a kit, that comprises: (a) a delivery
CC	device; In separate containers, (b) the oligonucleotides; (c)
CC	instructions for adding a carrier and for use of the kit. The composition
CC	of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC	analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC	beta-adrenergic agonist. The composition is useful for preventing or
CC	treating a respiratory, lung or malignant disease. The administered
CC	composition comprises oligo and is administered to reduce the production
CC	or availability, or to increase the degradation of the target RNA or to
CC	reduce the amount of target polypeptide present in the lungs. The
CC	pulmonary obstruction, and/or bronchoconstriction and/or lung
CC	inflammation, allergies and/or surfactant hypoproduction are associated
CC	with a disease or condition such as pulmonary vasoconstriction,
CC	inflammation, allergies, asthma, impeded respiration, respiratory
CC	distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC	hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC	transplantation rejection, pulmonary infections, bronchitis or cancer.
CC	The reduced adenosine content of the anti-sense oligos corresponding to
CC	thymidines present in the target RNA serves to prevent the breakdown of
CC	the oligonucleotides into products that free adenosine into the system
CC	e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC	prevent any unwanted effects due to it
SQ	Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX	
XX	
Query Match	1.1%; Score 14.8; DB 1; Length 20;
Best Local Similarity	88.9%; Pred.No. 4.4e+02;
Matches 16; Conservative	0; Mismatches 2; Indels 0; Gaps 0;
OY	1520 AAAAAAAAAAGTAAAA 1537       
Db	1 AAAAAAAAAAAAAAAAAAAA 18
RESULT 749	
ABD24795	
ID ABD24795 standard; DNA; 20 BP.	
XX AC	ABD24795;
XX XX	
DT 29-JUL-2004	(first entry)
XX XX	
DE A1122689-derived oligonucleotide SEQ ID 3807.	
XX XX	
KM Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;	
KM Respiratory tract inflammation; adenosine sensitivity; lung; cancer;	
KM Surfactant depletion; antiallergic; antiinflammatory; antiaesthetic;	
KM Analgesic; hypotensive; immunosuppressive; cytotoxic; cystic fibrosis;	
KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;	
KM Respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;	
KM Emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;	
KM Pulmonary transplantation rejection; ssr primer.	
OS Homo sapiens.	
XX PN	WO200285309-A2.
XX PD	31-OCT-2002.
PF 23-APR-2002;	2002WO-USO13143.
XX PR	24-APR-2001; 2001US-0286036P.
PA (EPIG-) EPIGENESIS PHARM INC.	
XX NYce JW, Li Y, Sandrasegara A, Katz E, Pabalan J, Aguilar D;	

PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 3807; 763pp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18  
XX  
RESULT 750  
ABD25934  
ID ABD25934 standard; DNA; 20 BP.  
XX  
AC ABD25934;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE AA505075-derived oligonucleotide SEQ ID 4946.  
XX  
KM Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KM respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KM surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KM analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KM respiratory distress syndrome; allergic rhinitis; pulmonary hyperinflation;  
KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KM pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.

XX  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 4946; 763pp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;  
XX  
Query Match 1.1%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 4.4e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1520 AAAAAAAAAAGTAAA 1537  
Db 1 AAAAAAAAAAAAAAAAAA 18  
XX  
RESULT 751  
ABD25935  
ID ABD25935 standard; DNA; 20 BP.  
XX  
AC ABD25935;  
XX  
DT 29-JUL-2004 (first entry)  
XX